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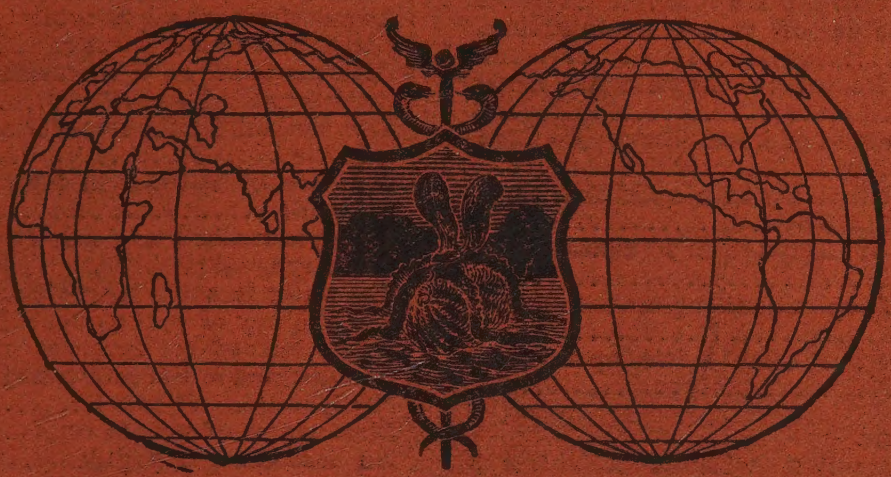

A QUARTERLY REVIEW

OF THE MOST IMPORTANT ARTICLES APPEARING IN THE MEDICAL PRESS AT LARGE.

EDITED BY

CHARLES E. SAJOUS, M. D.

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THE ANNUAL.

With the end of 1887 will close one of the most fruitful years in the history of medicine, one in which, in almost every branch, there has been some marked advance. More, perhaps, than in any before, has such brilliant exchange of thought taken place, so many great minds revealed themselves and claimed a place among the celebrated. 1887 will mark a new era in progressive medicine, and the constantly increasing ranks of able writers, the greater interest in society proceedings, and the growing demand for medical literature, are but the primary evidences of an epoch during which gigantic strides will be made in every field. Bacteriology, abdominal surgery, surgery of the nerves, etc, etc., bear witness to this assertion, although they form but a small part of the imposing array.

The ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES could not have been inaugurated under better auspices. Its plan, its aim, and all its elements are imbued with the spirit of progress that characterizes the times, and to those who peruse its contents, it will be a mirror whose luminous surface will reflect progressive medicine, *not* in the form of matter from which progress will have to be slowly and painfully sifted by the reader, but in carefully digested, easily assimilated form, ready to be absorbed without loss of mental labor or of precious time.

It need hardly be said that with rapidly increasing literature, more and more replete with interesting matter, the time necessary to even *attempt* to keep informed should be increased in proportion. But such is far from being the case. While literature has increased a hundred fold, the physician's available time, has, if anything, decreased. As a natural result, he must either remain uninformed, or sacrifice practice and rest. The advent of specialties is an indication of this fact, they alone affording the practitioner the opportunity of keeping up to the highest standard, at least, in his chosen branch.

Were it even otherwise, were the physician able to devote every hour of the day to study, he could not then keep abreast of the times, for in order to find the *progressive* features of each article, he would have to read it in its entirety, and waste ninety-nine per cent. of his time upon old matter. The ANNUAL selects the one per cent. of *new* matter, and presents it in a condensed and clear form; in other words, it enables the practitioner to obtain the greatest possible benefit from the limited time he is able to devote to reading, by furnishing him with the *essence* of medical literature.

The mere statement that there are at least seven hundred medical journals published in the world, is sufficient to give an idea of the immense amount of matter constantly being added to the general store of knowledge. Many of these are published in languages seldom translated into the English language,—Russian, Polish, Swedish,

Danish, Dutch, Turkish, Roumanian, Portuguese and Japanese being but a few in the list. Many valuable suggestions are thus lost to the world and finally buried in oblivion.

The ANNUAL, through its staff of corresponding editors, will keep the practitioner informed of the work done by all nations, including those seldom, if ever heard from. Where no journals exist, its correspondents will report all valuable native methods of treatment unknown to us, and clinical observations upon diseases seldom seen in civilized countries. The ANNUAL, therefore, will be

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The Satellite

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VOL. I. PHILADELPHIA, NOVEMBER, 1887. No. 2.

GENERAL SURGERY.

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ANOTHER BRILLIANT CURE OF RUPTURED BLADDER BY ABDOMINAL SECTION.

Patient under care of Mr. T. Holmes. Man, aged 24, at the end of a several days' debauch was kicked in the abdomen. Had urinated one hour before injury, and had been drinking freely during the interval; afterwards walked quarter of a mile. Was admitted two hours later, but not seen by Mr. Holmes until six hours had elapsed. The following symptoms were noted, and immediate operation decided upon: Bloody urine by catheter, and (under ether) though the bladder could not be palpated, yet large quantities of bloody fluid continued to come away when abdominal pressure was made. The point of the catheter could be felt nearer to the umbilicus than the pubes. It was then proved by incision that the rent, if present, was not extra-peritoneal, and the abdominal cavity was opened to the extent of three inches and a half by extending the exploratory incision. A horse-shoe shaped rent, convex to the right side, and two inches long, could then be plainly seen in the upper portion of the bladder. Temporary sutures were introduced to the depth of the mucous-membrane layer on either side of the wound for holding it in sight, while Lembert stitches were placed at close intervals along the torn margins. Eight were thus introduced, and tested by injecting the viscus through the urethra. No leakage took place. The abdomen was then freely irrigated and washed with hot water, wiped dry, and the parietal wound closed. An unsuccessful attempt was then made to introduce a drain into the bladder through a perineal section. One hour saw the operation begun and finished.

Convalescence was very rapid and wholly uneventful. Urine passed by his own unaided efforts from the very first. Was discharged in a little over two weeks. His health had remained excellent up to a much later date.—*Lancet*, July 23, 1887.

STAB-WOUND OF LIVER; ABDOMINAL SECTION; CURE.

From the rapidly accumulating knowledge and literature of the subject of abdominal section for various trauma, we cull the following case, reported by Burckhardt, of Stuttgart. It probably represents the first case of successful dealing with a liver wound:—

The patient, a man aged 25 years, had been stabbed in the lower portion of the left hypochondrium with a butcher's knife.

Symptoms on admission to hospital were: Increasing collapse and belly dullness; those of intra-peritoneal hemorrhage. He was operated upon without delay, wound extended freely, and liver exposed. Abdominal cavity found full of extravasated blood, which was still to be seen pouring from a wound of the liver one-half inch in length and two inches in depth, situated in the left hepatic lobe. Wound was firmly packed with iodoform gauze, and the ends of the strips brought out through an opening left in the parietal incision, when the latter was brought together. Everything was cleansed with sublimate solution, a drain-tube introduced, and dressing applied. Free discharge of bile soon commenced, and lasted for eight weeks, from which time a discharging sinus kept open for seven months, when an overlooked strip of gauze presented in the sinus-opening. This being removed, complete closure and cure speedily ensued.—*Centralblatt für Chirurgie*, No. 5, 1887.

ELECTROLYSIS IN THE TREATMENT OF URETHRAL STRICTURE.

Dr. Ström, of Christiana, Norway, alluding to the treatment of urethral stricture by electrolysis, says that too strong currents make false passages, even if the sound is in the proper position; which latter, he thinks, should always be proved by a director. He recounts a case where, during electrolysis of an œsophageal stricture, the sound worked its way, in the course of two *séances*, to just beneath the skin at the side of the trachea. Cellulitis followed, and no further electric treatment was used. He considers the treatment of strictures by this agent as not free from risk, and uncertain, nor is an apparent cure always permanent. Especially does he regard it as useful in cases where the strictures are still permeable, but cannot be further dilated or kept open to a sufficient calibre.—*Internat. Centralblatt*, July, 1887.

DIGITAL EXPLORATION OF THE BLADDER.

After a considerable lapse of time since the appearance of his first writings upon this subject, the far-famed and honored pen of Sir Henry Thompson again deals with this very interesting procedure.

This interval of time allows him to speak from much wider experience, and with even more authority.

Upon manifestly cancerous cases he has always refused to operate, and, indeed, only knowingly interferes in this manner with cases of papilloma, or where it is suspected. Occasionally it has seemed advisable to make the perineal opening simply to relieve pain and permit ready egress of urine.

The term "digital exploration" does not include these latter cases, but is strictly limited to an operation having for its object removal of a tumor. By choice and inclination he operates only for papilloma, "the formerly so-called 'villous' tumor—a light, floating, often single, pedunculated, but exceedingly vascular growth, much more common with us, as the cause of dangerous hemorrhage, than cancer and epithelioma." Sometimes, he acknowledges, exploration of the bladder may be resorted to for diagnosis of early stages of malignant disease before their presence can be discovered by rectal touch, as can almost invariably be accomplished in later stages. Exclusive of those where he has simply operated to give temporary relief, his tables contain reports of 34 cases. Of these, 25 were simple papilloma (one proved to be associated with cancer, and two or three with myoma); myoma, 4; epithelioma, 2; carcinoma, 1; sarcoma, 2. Papilloma, nevertheless, was the chief and distinctive feature in all these thirty-four cases.

Unless of large development, papilloma yields no sign of its presence to rectal examination nor to the exploring sound, and its presence can only be proved by symptoms and microscopic examination of the urinary *débris*, or a piece of the growth removed by lithotrite, where characteristic structure is sometimes to be seen with exquisite distinctness.

If these methods of diagnosis fail, he would have no hesitation in making his perineal *boutonnière*, and thus gaining absolute proof by digital exploration. This can easily be done in nine out of ten cases.

The writer emphatically reiterates his much-questioned opinion, that with full anæsthesia the whole surface of the bladder can, in ninety per cent. of all cases, be effectively gone over by the tip of the index finger, so introduced, and assisted by the other hand placed upon the abdominal wall above. A papilloma being then found, the question of its removal presents itself. For one who is expert in using forceps through a perineal wound, he advises that method. Otherwise, or in case of a large tumor, he would perform supra-pubic cystotomy.—*Lancet*, March 12, 1887.

CURE, BY OPERATION, OF CEREBRAL ABSCESS DUE TO OTITIS MEDIA.

The index of these times would seem to point with the same undeniable force to the fact that ruptured abscess into the brain, or so

threatening, or even there originating, should be dealt with by operation and eradication, as should the same conditions of the fallopian tube or ovary which threaten or has involved the peritoneum.

William Maceuen gives the history of a cure by operation of brain abscess. It was the abstracter's pleasure to see this case while in Glasgow last winter.

A boy, aged 9. Had been well until one month before admission to hospital. Then pain in ear (R) and interrupted sleep. Next day, skin hot and dry, vomited; later, drowsiness and "crying fits," due to acute pain in the ear. These symptoms lasted seven days. On the eighth day he had a violent chill. During the three weeks which elapsed from this time until his admission to hospital—on the nineteenth day—chills were of frequent occurrence.

Upon admission, was pale, emaciated, with livid lips and herpes. Short, catching cough. Temperature, 100.8°; pulse, 108. Drowsy; pain in right ear, from which came offensive discharge. On the third day in hospital, pain became very severe and chill followed. No evidence of retained pus in the ear. An opening was then made into mastoid cells by chisel, a stream of antiseptic solution passed through the wound and out by the external meatus, and a drain-tube left in. No change for the better followed, and the lad continued with rigors and to decline until the thirtieth day, when Dr. Maceuen was called in consultation. Fetid discharge was then coming from the ear, and the patient was in stupor. Abscess of temporo-sphenoidal lobe was diagnosed, and operation at once proceeded with. The middle ear was disinfected and the scalp cleansed. A half-inch disk of bone was removed from the squamous portion of the temporal bone, at a point one inch above and half an inch behind the centre of the external auditory meatus, and the membranes incised, whereupon the brain tissues greatly bulged out. A hollow needle was then carried in a direction towards the eminence of the petrous bone above the middle ear. Gas and pus of a most fetid nature at once flowed freely when the needle had gone to a depth of three-quarters of an inch. The needle aperture was enlarged with forceps, and portions of necrosed, brain-tissue removed. After all pus and necrotic tissue had been removed, the abscess cavity was washed out with boracic acid solution. A counter-opening was then drilled through the base of the skull, just above the osseous boundary of the external meatus, involving the squamo-petrosal suture, the membranes pierced, and the lowest portion of the abscess cavity reached by needle, and again washed out through this new channel. Chromicized chicken-bone tubes were introduced into both openings, boracic acid was thickly dusted on, and a dressing of sublimated wood-wool (paper pulp) pads superimposed.

Patient soon rallied, and he steadily improved from the time of

operation on. All cerebral symptoms vanished. The wound was dressed once weekly, and the tubes as often shortened as forced out by granulations. A lapse of six weeks saw the child plump and perfectly well.—*Lancet*, April, 1887.

GLYCEROLE OF BELLADONNA FOR TRAUMATIC LYMPHATIC OBSTRUCTION.

Mr. Bellamy, of London, describes two most successful results from the use of an old remedy,—glycerole of belladonna, in traumatic lymphatic obstruction, and œdema resulting. The medicament was applied to the whole surface freely, and the part then wrapped in wool.

One case was a man, aged 30. The obstruction followed fracture, with great contusion middle of forearm, and was so great as to resemble elephantiasis. Patient was sent to him for amputation.

Two weeks' application of the belladonna and glycerine removed most of the swelling, and eventually it disappeared entirely. The same conditions following high-up humeral fracture, yielded even more quickly to its influence.—*British Medical Journal*, June, 1887.

HAUSMANN'S DEVICE FOR TREATING COMPOUND FRACTURES.

Dr. Malloy describes an important detail of the treatment of compound fractures of the long bones.

It is the device of Dr. Hausmann, chief assistant surgeon to Professor Schede. The usual process of opening up the seat of fracture by free incision, washing with $\frac{1}{1000}$th bichloride solution, removal of spicules, etc., having been gone through with, one or more small, perforated metal splints are made to bridge the fracture, and are screwed fast to both upper and lower fragments. The wound is treated antiseptically and openly, while the usual immobilization apparatus is applied. The plates are not removed until union is firm. They are of quite recent date, and still in the experimental stage of observation.—*Lancet-Clinic*, April 16, 1887.

RADICAL EXCISION OF HEMORRHOIDS.

Walter Whitehead, of Manchester, brings forward an operation for the radical cure of hemorrhoids, and well supports his claims for its general adoption by the recital of results in three hundred cases which he has so treated, without an instance of either death, secondary hemorrhage, ulceration, abscess, fecal incontinence, stricture, or, so far as he knows, recurrence. The latter he thinks impossible if his operation be properly executed.

Procedure.—Paralysis of sphincters by stretching; circular incision of mucous membrane at skin junction; separation of mucous membrane to a point beyond sphincters, drawing it down (including piles, of course), dividing it above, portion by portion, twisting bleeding vessels, and at once suturing the divided portion to the skin puncture before another portion is divided, and so on around the bowel.

Iodoform is insufflated as the wound is thus gradually closed, and after operation, a two-grain extract of belladonna suppository is introduced. Silk sutures are used, and allowed to come away themselves.

Patients are allowed to arise on the fourth day, and usually to resume work in two weeks.—*British Medical Journal*, February 26, 1887.

TOTAL EXCISION OF FISTULÆ IN ANO.

Lange gives the results of twelve cases in which he performed complete excision of fistulæ in ano. The entire tract of disease was, in each case, save one, excised, and the fresh-cut edges approximated by catgut sutures. Primary union took place in four instances; in three there was some suppuration, but practically primary union, and four healed by granulation. One operation could not be completed, and a fistula of small extent remained.—*New York Medical Journal*, February 12, 1887.

AVOIDANCE OF NERVES IN AXILLARY OPERATIONS.

Küster reminds surgeons of the desirability of avoiding the subscapular nerves while removing diseased axillary contents. They are most liable to injury during the cleaning out of cancerous glands. As result of their division, the shoulder movements are impaired, and the patient may, in some instances, be rendered unable to either lift the arm or move it backwards. He further states, that with care he is able to avoid the nerves in most cases. Most apt to be injured are those to the teres major and latissimus dorsi, while the subscapularis more frequently escapes.—*Centralblatt für Chirurg.*, No. 11, 1887.

CURE OF TETANUS BY EXCISION OF WOUND ON TWENTY-SECOND DAY.

A man was admitted to Mr. Cotterill's wards of the Edinboro' Infirmary eight days after the onset of tetanus, and fourteen days after injuring the ball of his thumb with broken glass.

Before admission, in spite of one-half grain calabar bean given every three hours, the symptoms had become more and more distressing. While in the hospital all the usual remedies were well tried, but without effect. On the twenty-first day after injury, violent convulsions, with opisthotonos, came on, and it was forthwith decided to excise the source of irritation.

Pressure over the ulnar nerve at the bend of the elbow would promptly give rise to convulsion, though similar irritation of other nerves, or the wound itself, failed to have any such effect. The entire wound, scar, and contiguous structures were removed by the knife on the twenty-second day. From the time of operation progress was most satisfactory; a rapid and uneventful recovery was the result.

Mr. Cotterill comments upon the benefit derived by this case from an operation undertaken so late in the course of disease, refers to the

opinion of Fayrer, who believes operation might be of service in the first two or three days of tetanus, but without avail in later stages, and cites the affirmative opinions of Nicaise, Brown-Séquard, and Annandale.—*Lancet*, February, 1887.

TOTAL EXTIRPATION OF THE SHOULDER.

Andradas, of Madrid, lately reported a successful extirpation of the shoulder. The case was one of enormous sarcoma in a girl of seventeen. It involved the humerus and surrounding muscles, the scapula, and external end of the clavicle. The axilla was occupied by a portion of the diseased mass. In the removal of the growth, vessels were tied as discovered. The external half of the scapula was removed. That bone was detached from before backwards, and in closing the wound, drain-tubes were placed in dependent situations and antiseptic precautions observed.—*London Medical Record*, March, 1887.

A similar case, where the operation was done in two stages, is reported by Paul Swaine in the *London Lancet*, January, 1887. At the first operation the humerus only was found involved, and was removed at the shoulder joint. The tumor was a myeloid sarcoma. Two months later the disease had recurred, when the scapula and the acromial end of the clavicle were removed. The wound healed kindly. Some weeks later the patient died of pneumonia.

Mr. Charters Simons has also reported a somewhat similar case where the entire scapula was successfully removed for osteo-sarcoma. Patient well two years after operation.

In this category may also be mentioned "The Excision of the Entire Clavicle for Central Carcinoma," by John Sloane, M.D., in the *American Journal of the Medical Sciences*, April, 1887. The tumor, which occupied the centre portion of the bone, had grown rapidly.

During an examination of the shoulder the bone fractured, which added to the difficulty of the operation. No ligatures were used, but "compressors" applied to bleeding arteries. Three months after, no sign of return of the disease was present.

ABDOMINAL SECTION FOR THE RELIEF OF PERFORATION OF THE VERMIFORM APPENDIX.

The Transactions of the College of Physicians of Philadelphia, for June, 1887, contain the report of two cases of abdominal section, by Thomas G. Morton, M.D., for the relief of perforation of the vermiform appendix, in both of which the diseased appendix was excised, one case recovering:—

Case I.—Male, aged 26. Had always enjoyed good health, except, for past three or four years, has been subject to severe occasional attacks of abdominal pain, coming on without warning, whilst apparently in excellent health. These attacks, lasting a few hours, usually

passed gradually away, leaving him prostrated; but he soon recovered from these, and then would remain entirely well until the next seizure. April 20, 1887, complained of having taken cold, tongue coated, loss of appetite, bowels constipated. April 23d, abdominal pain, no sleep, restlessness. All symptoms increased during succeeding three days. A resisting mass as large as a small egg could be detected midway between umbilicus and middle of Poupart's ligament. Temperature at that time $103\frac{1}{2}^{\circ}$; pulse, 140. April 27th, was seen by Dr. Morton in consultation.

Abscess and probable disease of appendix diagnosed, and upon his making abdominal section, this gave vent to much pus with fecal odor. The appendix, which was swollen to size of a man's thumb, exhibited a perforating ulcer extending three-quarters around its circumference. Ligature applied at terminal portion of appendix, close to cæcum, and the whole former organ removed, together with a large piece of adherent omentum which projected into the abscess cavity. Abscess walls curetted, and closure with drain-tube. Recovery rapid and complete.

Case II.—Woman, aged 34. Pain in ileo-cæcal region, occasionally, during past three years. Seven months previously severe attack of pain and vomiting; another, two months before operation. Three days previous to operation, severe pain in right hypochondrium, vomiting. Temperature, 100°. Next day bilious vomiting, abdomen tympanitic and tender. No feces or flatus passed. Temperature, 101°; pulse small, 110. Symptoms gradually increased.

Section urged, but declined until next day, when she was in extremis.

Section proved presence of conditions same as in Case I. Appendix as large as man's little finger, had two perforations, and was, as in Case I, removed close to cæcum. Death in three hours.

DIAGNOSTIC VALUE OF RECTAL EXAMINATION.

Schmitz records three cases in which examination per rectum proved of value in diagnosis.

All were children, aged 3–5, whose symptoms were slight flexion, abduction, and inward rotation of the thigh. In one case, rectal palpation discovered a well-marked tumor in the region of the acetabulum, while the other two proved to have abscesses in the same region, and equally distinct to touch. Rotation of the femur, even with full anæsthesia, gave rise to no friction. The femoral head was excised in all three, and while it and its cartilage in each case was found healthy, yet the acetabulum was markedly and extensively diseased. He thinks this additional diagnostic resource will prove of much use, especially in the very early stages of hip-joint disease.—*Centralblatt für Chirurgie*, No. 6, 1887.

TREATMENT OF FRACTURES OF THE PATELLA.

In cases of old fracture, with great separation of the fragments of a patella, von Bergmann proposes, and has in one case carried to a successful end, the following procedure: If incisions above and at the side of the fragments do not permit their coaptation, he then makes a transverse incision below the tubercle of the tibia down to the bone, and with a broad chisel separates the tubercle and its attached ligamentum patella. This permits the easy approximation of the fragments, and they are retained by catgut suture. In the case thus operated upon, one month saw very firm, apparently bony union of the patella, and the tubercle of the tibia had also firmly united at its former site. The joint motions afterwards became almost perfect.—*Centralblatt für Gesamm Ther.*, 1887.

PARKER'S TREATMENT OF KNOCK-KNEE.

Rushton Parker commences the treatment of knock-knee, and other deformities of the lower tibius, by at once performing osteotomy, or fracturing the bones, and bringing the limb at once into a straight line. The patient is kept in bed until union of the bone is complete. With vigilant inspection and little labor, such a case can be ready for walking in about a month. It does not matter in which direction the bone be divided, provided it be divided and an actual fracture made. Bandy-leg and rickety bends of tibia, are treated by forcibly straightening when one of the three joints of the limb is out of line with the other two. Soft bones straighten with mere green-stick fracture.

Knock-knee, with great femur twist, is treated by fracture of the middle of the bone, and the limb is twisted and forced into right position. A saw is used when operating on the compact shaft of the femur, a chisel when dividing the ends of the bone. In case of double deformities both limbs are operated upon at the same time.—*Liverpool Medical Journal*, for January, 1887.

SUPRA-PUBIC LITHOTOMY IN A CHILD FIVE YEARS OLD.

A male child, aged five years, was lately operated upon for stone, at Guy's Hospital, by Mr. Golding Bird, by the supra-pubic method. The rectum was distended, as usual in older persons; two and a half ounces of water being injected into the colpeurynter, and just before opening the bladder half an ounce more was introduced. An incision one and a half inches long from the symphysis was made. After the removal of the stone, a small one, two wire sutures were introduced through the edges of the sheath of the rectus muscle; catgut drainage; no bladder stitching; catheter tied in. Result: cure.—*British Medical Journal*, for March, 1887.

PATHOLOGY OF DUPUYTREN'S CONTRACTURE.

Kocher reports Langhaus' conclusions upon the histological and pathological conditions of the excised cords from cases of Dupuytren's contraction of the fingers.

He believes the changes to consist of, in small part, neoplastic, and, in great part, inflammatory alterations of the palmar aponeurosis and the surrounding tissues with the coats of their arteries and capillaries. A subendothelial granular adventitia had formed about these.

From the facts that the principal change is the great increase in number and size of the tissues affected, the appearance of rod-shaped or oval granules, for the most part regularly arranged in a longitudinal manner, separated laterally by fibres of the ground substance, and that no migration of leucocytes was observed. Langhaus concludes that the disease is of purely neoplastic origin, while upon this point Kocher differs from him, and believes the alterations are simply those of chronic plastic inflammation, in absence of conclusive proof that emigration of corpuscles had not occurred. Whichever theory may prove correct, the practical bearing of the investigation is the conclusion of both writers, that extirpation of the diseased process is the only proper remedial measure. Adherent skin should be removed with the excised aponeurosis.—*Centralblatt für Chirurgie, 1887.*

TECHNIQUE OF OPERATIONS UPON THE BRAIN.

Quite recently Mr. Victor Horsley has given the details of his method of procedure in dealing with surgical affections of the brain. We append a very brief abstract of the chief points:—

A small dose of morphia is hypodermatically given, and shortly followed by chloroform anæsthesia. The entire scalp is then made surgically clean. A large flap, including periosteum, is then turned up, and a small disc of bone removed by trephine. Having thus determined the thickness of the skull, a large opening is made by sawing with Bonwill's surgical engine, the final separation being accomplished by cutting pliers. He always sows bone grafts in closing a wound where much bone has been removed, but does not think them of much utility. Where very large areas have been removed the patient must subsequently wear a light, perforated celluloid cap. The dura mater should be freely excised whenever found to be adherent to a tumor, or to have undergone other serious change. He advises very free excision of growths, and that brain tissue should be freely removed, if necessary.

The wound, in closure, is accurately sewn, except at its most dependent point, where the space of an inch is left open for drainage, though no actual drain is used. He believes that the arachnoid will absorb fluids in the same manner as will the peritoneum. He still uses

the original Lister dressing, and advises that the patient be placed upon solid food so soon as he craves it. Ten days or a fortnight usually suffice for the stay in bed.—*British Medical Journal*, April, 1887.

STRETCHING VERSUS OTHER NERVE OPERATIONS.

According to Dr. Felix Lagrange, nerve stretching differs from other nerve operations, in that its effect is felt even by the nerve-centres, especially the cord, and that to this can be referred its power of modifying the sensory functions of nerves without especially affecting their motor action.

Hemorrhages, and chronic and acute inflammation of these centres, often very severe, may follow nerve stretching. Therefore, the operation is to be regarded as a powerful, though dangerous therapeutic measure, not to be undertaken without serious consideration. In general it is to be resorted to only in senso-motor nerves, whilst section being more preferable for sense nerves.

Section, or evulsion, is the proper operation for infra-orbital neuralgias, also for similar affection of the frontal and nasal branches. Chronic glaucoma has been much benefited by thus dealing with the nasal nerve, the acute form even more so. The sciatic can usually be stretched by forced positions of the limb. The operation is unjustifiable in disease of the cord itself. Tetanus and torticollis are best treated by neurotomy. Stretching may prove of some value in spasms and contractures of muscles, and in reflex epilepsy, but is useless in lepra anæsthesia and atrophy of the optic nerve.—*Boston Medical and Surgical Reporter*, June, 1887.

OPHTHALMOLOGY.

UNDER THE CHARGE OF

WILLIAM THOMSON, M.D.,

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ASSISTED BY

GEORGE FRIEBIS, M.D.,

Chief Clinical Assistant in Ophthalmological Department Jefferson College Hospital.

CATARACT EXTRACTION WITHOUT IRIDECTOMY.

Dr. Knapp reports 66 per cent. of perfect recovery by means of this operation.

If we compare the simple extraction with the extraction combined with iridectomy, we find as *advantages* of the former the following:—

1. It preserves the natural appearance of the eye.
2. The acuteness of vision, other things being equal, is greater.

3. Eccentric vision and "oretentation" (correct localization of objects in the visual field) are much better, adding a great deal to the comfort and safety of the patient.

4. Parts in direct connection with the ciliary body, such as shreds of the capsule and iris, are not so liable to be locked in the wound, and thus transmit morbid conditions to the most vulnerable part of the eye, the ciliary body.

5. It may not necessitate so many after operations.

As *disadvantages*, may be mentioned:—

1. The technique of the operation is more difficult in all its parts: (*a*) The section must be larger, to let the lens pass through the aperture, the size of which is diminished by the iris lying in it; it must be more accurate to secure coaptation, and it must be more rapidly performed in order to prevent the iris from falling before the knife. (*b*) The opening of the capsule requires a deeper introduction of the cystitome into the anterior chamber. (*c*) The expulsion of the lens is more difficult. And (*d*) the cleansing of the pupillary area is much more troublesome than in combined extraction.

2. Prolapse of iris and posterior synechiæ are more numerous.

3. It requires a quieter and more manageable patient during and after operation than is needed in combined extraction.

4. It is not applicable to all patients, whereas combined extraction can be used as a general method.

Indications for the Iridectomy.—When an iridectomy should be made:—

1. When, in case of fluidity of the vitreous and rupture of the suspensory ligament of the lens, the cataract on pressure does not present in the wound but only vitreous escapes.

2. When the section is insufficient, and the iris, in the attempt to expel the lens, has been pushed into the wound, and vitreous presents or escapes.

3. When, during the operation, the iris had been bruised or injured.

4. When the sphincter is unyielding, more especially when a peripheric piece of iris falling before the knife has been exsected. I would rather cut a rigid sphincter than expose the patient to prolapse of vitreous in the attempt to overcome its contraction by undue pressure.

5. When the iris, after the expulsion of the lens and cleansing of the pupillary field, proves irreducible.

In conclusion he summarizes as follows:—

Simple extraction is an operation of the highest order, and practicable, in the majority of cases, with the same degree of safety as the

extraction combined with iridectomy. In a considerable minority, however, the latter method is preferable; in a number of cases the indications for the iridectomy manifest themselves before; in others, only during the operation.—*Archives of Ophthalmology*, March, 1887.

TREATMENT OF SERPIGINOUS ULCERS OF THE CORNEA.

Dehenne recommends the following treatment:—

1. Incise the superior and inferior lachrymal puncta and irrigate the lachrymal duct freely with an antiseptic solution (boric acid 4 to 100).
2. Irrigate the conjunctival sacs with sublimate solution, 1 to 2000.
3. Cauterize the ulcerated surface with a fine, thermo-cautery point at white heat.
4. If there be pus in the anterior chamber, perforate the cornea with the same point and evacuate the pus.
5. Drop into the diseased eye, four times daily, five or six drops of a neutral solution of sulphate of eserine, 1 to 200.—*L'Union Médicale*, of May 7, 1887.

JAVAL'S METHOD OF TREATING STRABISMUS.

At a recent meeting of the Académie de Médicine, M. Javal gave an account of his method of treating strabismus. The affection must be dealt with according to circumstances, so that, while tenotomy alone would sometimes be proper, in other cases it should give place to optical treatment, carried out by means of various instruments which he described.

M. Javal divides strabismus into two categories, in one of which there is myopia, whilst in the other there is a certain degree of hypermetropia. In the former kind, the strabismus may be either convergent or divergent. The convergent form is the rarest, and is easily cured by the employment of concave glasses; the divergent is consecutive to the former, and is cured in the early stage by means of the optical instruments described. At a more advanced period, recourse must be had to tenotomy, and the movements of the muscles of the eye must be attentively watched. Strabismus, with hypermetropia, is convergent; it may be congenital, and it is more difficult to cure the more nearly it dates from the time of birth. At first intermittent, it afterwards becomes permanent. It is only in the latter case that an operation is indicated; as long as the affection is not definitely established, care should be taken not to interfere otherwise than by the optical method of treatment, which, in cases of accidental strabismus, is quite sufficient to effect a complete cure. In certain rare cases, a radical cure may, with patience, be obtained, even where an operation would seem quite justifiable.—*Annales d'Ocul.*

LATE MANIFESTATIONS OF SYPHILIS IN THE EYE AND THEIR TREATMENT.

Abadie points out that while iritis, choroido-retinitis, and optic neuritis, when the result of acquired syphilis, are very amenable to ordinary mercurial treatment, and especially to inunction, this has little or no influence upon interstitial keratitis, the result of congenital syphilis. In 1884 (*Annal. d'Oculiste*, p. 145) the author recommended the treatment of such cases by subcutaneous injections of bichloride of mercury. Since then he has continued to employ this treatment upon a large scale, and has not only confirmed the favorable conclusions which he had previously formed, but has found that it is also efficacious in several other conditions. The following is the solution that he employs:—

℞.	Hydrarg. perchlor.	1 part.
	Sodæ chlor.	2 parts.
	Aquæ, destil.	100 parts.

An injection of about twenty drops is made every other day beneath the skin of the back. Care should be taken to plunge the needle well beneath the skin, otherwise severe local irritation is apt to be produced. The injection should be followed by slight friction.

Sometimes it is not well borne at first, producing in nervous subjects considerable general malaise; this can usually be prevented by first injecting a few drops of cocaine. It is only very seldom that toleration is not established after a time. It is chiefly in the worst cases of interstitial keratitis, in which the infiltration is the most extensive and dense, that the author claims to have procured the most striking results. The improvement generally becomes obvious after the twelfth or fifteenth injection. The favorable results that have also ensued from this treatment in cases of disseminated choroiditis have led the writer to suspect that many of these also may be due to inherited syphilis. Certain forms of choroido-retinitis in the region of the maculæ are not unfrequently met with in young subjects, and are characterized by somewhat sharply atrophic areas surrounded by accumulations of pigment. It is not always easy to determine whether such are examples of congenital malformation, or of a morbid process that is still going on, and the question can only be decided by watching the case over a considerable period. In several cases of this kind, occurring in patients between the ages of fifteen and twenty-five, this treatment has been followed by a very considerable improvement in the vision. Among late manifestations of acquired syphilis are paralyses of the ocular muscles. The author divides these into two classes: First, there are the cases in which the paralysis is due to a neoplasm, a gumma, periosteal effusion, or exudation at the base, compressing the nerve trunks; these occur in the tertiary stage, several nerves are affected, and there are severe pains in the head and vertigo,

showing that the meninges are more or less implicated. Such are very amenable, if taken in time, to treatment by iodide of potassium and mercurial inunction. In the second class of cases the lesion is limited to one nerve, generally the sixth; the ciliary muscle or sphincter iridis may be affected, while the other filaments of the third escape. These cases of isolated paralysis, which resist obstinately ordinary anti-syphilitic treatment, yield to the subcutaneous injection of the perchloride. Unless we are mistaken, the plan of subcutaneously injecting mercury is older than 1884; at one time an albuminate of mercury was prepared for the purpose. If the results are as good as they appear from this paper, it is strange that the treatment should have fallen practically into disuse. It would be interesting to have statistics of a large number of cases thus treated.—*London Medical Record*, January 15, 1887.

GOUTY AFFECTIONS OF THE EYE.

According to M. Zychon, gout may attack all parts of the eye, sometimes the eyelids, but very frequently the lachrymal ducts. It has an especial preference for the sclerotic, the iris, and the ciliary body, causing glaucoma, and also for the choroid and the retina, where it produces atrophy and a characteristic exudation. These various alterations are progressive, but happily they are not very severe, as they do not entirely destroy the sight. Gout, whatever organ it attacks, marks its presence by congestive eruption and by hyperæmia more or less continuous or periodical, and this holds good of the eye. All the gouty affections of the ocular membranes fall almost exclusively into the category of *goutte larvée*. Among them, M. Zychon describes lithiasis of the upper lid. It consists of a deposit of urate of soda, similar to that which is seen on the helix. On the conjunctival membrane and near the free edge of the upper lid are to be found small granulations containing a calcareous deposit encysted in the mucous membrane; the little body protrudes under the conjunctiva in the form of a white point, which is hard and resisting. As long as this body does not protrude the patient does not complain; but when the conjunctiva begins to ulcerate, well-defined local congestion, together with a very limited ulceration of the cornea takes place; moreover, the eye is inflamed and painful, and photophobia and epiphora are present. It is only on turning back the lid that the condition is discovered. The treatment consists in extracting the little calculus with the point of a needle. Another manifestation of gout is a dry eczema of the eyelids resembling pityriasis, which usually begins on the lower lid. It is characterized by very fine, small scales, which produce a sensation of heat and itching. This affection is troublesome on account of the insupportable itching to which it gives rise. Dusting with calomel,

several times a day, is the most effective remedy; morphine may be often added to the calomel with advantage, in the proportion of ten centigrammes of the former to ten grammes of the latter. Gouty conjunctivitis usually occurs consecutively to dry eczema of the lids. Sometimes, however, it appears as a primary lesion in gouty subjects; and, in such cases, the conjunctival eruption alternates with articular gout. Spontaneous extravasation of blood under the conjunctiva has also been observed in gouty patients. The hemorrhage which is due to friability of the arterial capillaries, is not serious in itself, but forms an indication as to the general state of the patient. There is one form of keratitis attributable to gout, which M. Galezowski calls "calcareous keratitis;" this form, however, which is characterized by an opacity in the form of a narrow band, is very rare. On the other hand, inflammation of the sclerotic may be called the typical gouty affections of the eye. It consists of a swelling of the sclerotic, with peripheral vascular injection. It is often intermittent, attacking first one eye and then the other; finally it becomes chronic. The inflammation, after remaining for a long time indolent, may suddenly produce unbearable neuralgic pain, together with very pronounced photophobia and epiphora; it is often followed by iritis.—*Recueil d'Ophthalmologie.*

INTRA-OCULAR CYSTICERCUS.

Dr. Van der Laan gives an account of an ophthalmic case which puzzled him for some time. A man had been suffering of inflammation in the left eye for about one year. On examination there were found serious irido-choroiditis, almost entire loss of vision, opacity of cornea, and increased intra-ocular tension. Several times paracentesis was performed with some benefit. Iridectomy being refused, mercurials and purgatives were given for twelve months, during which time considerable improvement had taken place, ultimately permitting an ophthalmoscopical examination to be made. The retina was seen to bulge forward in one spot, where it was of a yellowish white, the prominence increasing as time went on. It was observed that its form varied, being oblong and round by turns; the patient also said that he sometimes felt something moving in his eye. He then remembered that, when, two years previously, he had consulted a country practitioner, he had stated that he could "detect an organism, possibly the ovum of a tænia," a diagnosis which now proved to be correct.

Dr. Van der Laan has published descriptions of the only two other cases of intra-ocular cysticercus he has seen in Portugal, which in many points differed from this case. He does not propose to operate until the cysticercus has succeeded in perforating the retina and thrusting its head and neck into the vitreous, when he hopes by means of a sclero-choroidal incision to free the patient from his parasite and to preserve the sight of the eye.—*Lisbon Medica.*

TRANSPLANTATION.

Dr. Charles H. May formerly reported a series of experiments consisting of transplantation of eyes of rabbits, quoting twenty-four cases experimented upon, of which six were declared (by him) successful. Encouraged by these favorable results, he now reports a case of transplantation in the human subject. As the operation is one of exceedingly delicate procedure, we shall quote his method in *extenso*. He selected a patient (who offered himself to be experimented upon), who, at the age of twelve years, had one eye destroyed by an explosion. The subject was in every particular well suited for the purpose, being in excellent health, with no constitutional taint. A very large-sized, brown buck, of the kind known as the Belgian hare, having brown eyes (matching as nearly as possible, though a shade darker than those of the patient), was etherized; the conjunctiva separated at one-eighth of an inch from the margin of the cornea all around, and the muscles and subconjunctival tissue severed, leaving as much areolar tissue upon the eyeball as was possible; the optic nerve was not divided at this stage, but the eyeball was covered by the lids, and attention now directed to the patient. The latter having been anæsthetized in the meanwhile, the conjunctiva was separated from the globe as close to the cornea as possible, a loop-thread was passed through each of the recti-muscles with the overlying conjunctiva, and after these muscles had been thus secured they were cut; the areolar tissue was loosened, keeping as close to the eyeball as possible, so as to leave as much tissue in the sac as could be left; the optic nerve was cut off close to the globe. The stump of the nerve was sought for with the finger,—felt, and a single thread of fine catgut passed through it with a needle and forceps especially designed for the operation. These forceps consist of ordinary fixation forceps, with their lower extremity widened and curved, concavity inward, so that when the ends are approximate they represent a circle, the diameter of which is three and a half millimetres, and the edges were slightly rough; the sides of the lower expanded extremity present small openings. The special needle consists of a lance-shaped pointed, curved needle, the eye being situated very near the point, mounted upon a handle.

The optic nerve having been seized with the forceps, the needle, threaded with fine catgut, was passed through the lateral openings of the forceps, and thus through the optic nerve; the suture was caught up from the end of the needle, after having traversed the nerve, the needle withdrawn, and the forceps removed; in this way the suture had been passed through the end of the optic nerve with a minimum amount of laceration and without loss of time. Attention was now given to the rabbit's eye, the enucleation of which was completed by cutting the optic nerve, dividing it as far back as was possible, and leaving upon the globe as much areolar tissue as was present.

The suture through the patient's stump was now passed through the optic nerve remaining upon the rabbit's eyeball and the ends of the two optic nerves were thus approximated and secured by an ordinary knot. The conjunctival sac was then stitched to the rim of conjunctiva remaining upon the rabbit's eye, ten sutures being employed; those inserted opposite muscles included the anterior extremities of these, and fastened them to the globe. During all this time the rabbit's globe remained perfectly clear. During the operation, saturated solution of boric acid was used freely upon the eye of the patient; no fluid of any kind was applied to the eye of the rabbit, previous experiments having led him to believe that the use of boric acid and of corrosive sublimate had hastened the clouding of the cornea. The eye being freed from blood, the lids were approximated, white vaseline and cotton applied; both eyes were bandaged, pressure upon the transplanted organ being avoided. Hot compresses were ordered; these consisted of four-ply pieces of linen, wrung out of hot water; they were applied over the bandage, and supported upon a wire frame, so arranged as to avoid pressing upon the eyeball by resting upon the margins of the orbits. Up to the eighth day everything progressed favorably, but upon removing the dressing on the ninth day examination showed a small ulceration at the lower edge of the cornea, with perforation. Discharge moderate and sero-purulent. The experiment was considered at an end, for, although patient was willing to submit to another transplantation, this was not considered justifiable.

In reporting this case, May did so with the hope that it might be regarded as a fair test-case; although, it is true that one case does not prove much, yet this one is entitled to special consideration in this respect, the patient had had every possible chance of success. Of good *physique*, with good care and nursing, and with extraordinary patience he made a capital subject for the experiment; then, again, he had flattered himself that the *technique* could not have been much improved. He had sufficient experience with the operation, both during the experiments upon rabbits and upon the cadaver, "so that there was no hitch in the proceeding."—*Archives of Ophthalmology*, March, 1887.

While following these experiments of Dr. May's with a great deal of interest, his results have only been confirmatory of our opinion of transplantation of rabbits' eye,—viz., that it could never be successfully performed.

STENO-CARPINE.

A new local anæsthetic, steno-carpine, an alkaloid derived from the gleditschia triacanthos, or thorny locusts, a tree indigenous to our country, has recently received considerable attention.

We are indebted to Dr. Goodman for its discovery, he having first made use of it as a poultice to the inflamed joint of a horse, merely for its emollient effects, and preparatory to making an incision. To his great surprise the incision was not accompanied by any pain, this led to further investigation and experiments as to its anæsthetic qualities, which have been demonstrated by several observers (Drs. Knapp, Claiborne, Seward, and Jackson), all confirmatory as to its mydriatic, as well as its anæsthetic qualities. Experiments have proven that it is analogous, but more potent in its action than cocaine, but Dr. Friebis having used it in a case of iridectomy, was not so fortunate as to obtain the full anæsthetic effect of the drug which is claimed for it. After the instillation of about five drops, at intervals of three minutes each, and by actual test, the obtunded sensibility of the cornea and conjunctiva was demonstrated, yet, to his surprise, excessive pain was experienced by the patient in every step of the operator's procedure. Dr. Jackson claims for it great mydriatic effects, equivalent to atropine. Dr. Knapp's experiments, likewise, while somewhat corroborative of the experience of Drs. Seward and Claiborne, yet were not so in all details claimed for it. So further clinical experiments are necessary in order to give this promising drug its proper status.—*Medical News*, September, 1887.

VERTICAL NYSTAGMUS.

Dr. F. D'Oench reports two very interesting cases of vertical nystagmus, which, by the proper adjustment of both spherical and cylindrical lenses, gained in one case in which vision in the right eye was $\frac{20}{100}$ improved to $\frac{20}{50}$, and in the left from $\frac{20}{40}$ to $\frac{20}{30}$. In the second case, in which vision of the right $= \frac{15}{15} + 1$ D, vision in the left eye, which was $\frac{15}{50} + 1$ D^c ax $90^\circ = \frac{15}{30}$; a result not very frequently obtained, also another rare feature in connection with these cases was that the nystagmus of one eye was so low, but for the use of the ophthalmoscope would have escaped detection. The interesting part of the report lies in the excellent vision obtained. In these cases we find, as a rule, a high degree of amblyopia, which no combination of lenses improves.—*Archives of Ophthalmology*, September, 1887.

ANATOMY OF THE CAPSULE OF TENON.

Mr. Lockwood exhibited a series of specimens from St. Bartholomew's Hospital, in which he showed the continuity of the capsule and sheath of the optic nerve behind, and its relations to the conjunctiva in front. The suspensory ligament of the eye and its attachments to the wall of the orbit were seen from different points of view. The intra-capsular ligaments of the various muscles, and their relations to the recti were demonstrated, and also the inward bend of the superior

rectus. He likewise drew attention to the tunica adventitia and to the check ligament of the recti; the latter he considers of importance in relation to squint operation. Doubtless the want of proper knowledge of the accurate relations of the parts, accounts for the failures which now and then occur in this operative procedure.—*Ophthal. Review*, vol. vi, 1887.

DYSLEXIA.

Professor Berlin has written a very interesting monograph upon the disease called dyslexia, which he believes allied to the alexia, or word-blindness of Kussmaul. He gives a clinical history of six cases, collected during a period of twenty-three years, all having this peculiarity, that they could read aloud the average type, Jaeger three to five, only a few words in succession. These words were correctly spoken and without confusion or stammering, but as soon as a few words had been read the patients seemed anxious to get rid of the book, and, on being questioned, stated that they had an unpleasant feeling which they could not well define. On being urged to take the book again and read a few words, they returned it in the same manner, and could not be prevailed upon to read again from any type. There was the same difficulty when they read "themselves" as when they read aloud, but ordinary conversation was perfect.

The first case quoted by him was a man 66 years of age, who came to Professor Berlin in 1863, complaining of difficulty in reading, the symptoms were of the character described; the trouble appeared suddenly, and could not be explained by any visual defect. He had myopia of 5 D. Whether the type was large or small the difficulty still remained the same. About half a year later on he developed cerebral symptoms unknown to Professor Berlin, and died of an apoplectic seizure.

The second case was a man 59 years of age, who had, in 1879, while ascending a hill, an attack of dyspnœa. The following day he experienced temporary aberration of vision, diplopia, and transitory darkness before his eyes; though this passed off, there remained some difficulty in using his eyes. This proved to be dyslexia; although vision was good, a moderate degree of myopia being present, but no other ocular abnormality. About a month later the symptoms disappeared, and the patient regained his reading power. Four years later he had apoplectic seizures, with tonic and clonic convulsions, followed by mental confusion and difficulty in finding the proper word, but none of the attacks were followed by paralysis. The attacks continued until 1884, when he died. The autopsy disclosed extensive atheroma of the cerebral vessels, the heart was hypertrophied, the aorta was likewise atheromatous.

The third patient was a man 75 years of age. In this instance the

dyslexia manifested itself suddenly, after a year of vague cerebral symptoms, weakness, and loss of memory, accompanied by numbness in the lower extremities, and slight aphasia. The aphasia improved, but the dyslexia and numbness, with awkwardness of the right hand remained. The diagnosis was somewhat complicated by incipient cataract in both eyes and right hemianopsia; both aphasia and dyslexia disappeared a few months later. He died of facial erysipelas a year afterwards; during that period there was no recurrence of the nervous symptoms. The autopsy showed well-marked atheroma of the left middle cerebral artery, which extended to its smallest branches, the other vessels showed no pathological changes.

The next case was a young man 29 years of age, who had had syphilis, with secondary manifestations, seven years prior. The dyslexia in his case was treated by inunction and iodide of potassium, but without avail, and soon symptoms of general paralysis ensued, of which he died a year later. The autopsy showed a chronic meningo-encephalitis.

The fifth patient was a lady 63 years of age, whose symptoms were typical in character. She had slight albuminuria, vision unaffected; no pathological evidences in fundus oculi; no impairment of speech. Cerebral embolism, or hemorrhage, was diagnosed. She improved for about a year, at the expiration of that time she had a severe attack of apoplexy, with convulsions, but no paralysis ensued. Soon after she had another attack, affecting her left side, and paralysis followed. Two years after the first seizure she died of apoplexy, but no details were obtained.

The sixth case was a man 43 years of age. In the right eye vision was *nil* from an old episcleritis. Vision of the left eye was good, but had red-green scotoma, of which he had not been conscious before; dyslexia was typical, and accompanied by headache and giddiness, but this time the left eye suffered of episcleritis, and he experienced likewise apoplectic seizures affecting the right side. Syphilitic endarteritis was diagnosed; under specific treatment followed an improvement of all the symptoms, though a slight degree of aphasia and weakness of the right extremities remained. The dyslexia likewise disappeared. Three years after the first attack he had severe headache, dyspnœa, and albuminuria; he also became completely aphasic, followed by coma and death.

Autopsy revealed cardiac hypertrophy, disease of the valves, renal embolisms, and in the brain a large area of softening, including the base of the left hemisphere, below the third temporo-sphenoidal convolution. Disease of the vessels was extensive, with adhesions of the pia mater, in the region of the fissure Rolando.

While several of these cases were but for a short time under

observation, and a few variously complicated, yet Professor Berlin considers them sufficient to render it certain that dyslexia is a special type of cerebral disease. He distinguishes it from asthenopia by the absence of confusion of the letters or pain in the eye, by the severe disturbance caused by reading, absence of the usual causes of asthenopia. While ocular abnormalities existed in several of the cases, yet the affection was considered independent of these. To sustain this view, he lays stress upon the attacks of giddiness, headache, hemianopsia, aphasia, apoplectic seizures, followed by motor and sensory disturbances. He considers the area involved in dyslexia to correspond with Terrier's visional centre. He also speaks of a case of dyslexia recorded by Nieden (*Archiv. für Augenheilk.*, Bd. xviii., p. 162), in which the lesions were found to be hemorrhage in the left corpus striatum. This patient when urged to read, showed symptoms reminding Nieden of the terror of hydrophobia patients, he improved sufficiently to read a few lines at a time, but died of gastric catarrh and asthenia. Professor Berlin regards dyslexia as symptomatic of a local lesion in the left hemisphere, in the neighborhood of Broca's area, prognostic of severe and probably fatal disease, and consisting of extensive vascular degeneration, producing either permanent disease, or more or less impairment of the reading centre, or parts leading to it. Treatment gives but little hope of success, and even in the cases of syphilis, as shown by one of the cases, the prognosis should be guarded. Attention to general hygiene seems to be the sheet-anchor in these cases. —*Ophthalmic Review*, vol. vi, 1887.

OTOLOGY.

UNDER THE CHARGE OF

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CEPHALALGIA PHARYNGO-TYMPANICA.

Dr. E. Legal (Breslau) reports ten out of a series of thirty cases in which the cardinal symptoms were neuralgiform pains in the temporal and occipital regions—paroxysmal, periodic, generally unilateral —accompanied by slight aural symptoms (subjective) or none. The following sensitive points were noted :—

1. Point temporal of Valleix—one half cm. in front of superior border of the tragus—constantly.

2. Major occipital—at the point of emergence from under the trapezius—frequently.
3. Temporal branch of subcutaneous malæ rarely.
4. Supra-orbital—whenever the nasal mucosm was involved.

Examinations revealed:—

1. Altered reflex of the membrana tympani.
2. Fibrous degeneration of the membrana tympani (two cases).
3. Perforation of the membrana tympani with accumulation of inspissated pus, etc. (one case).
4. Sinking of the membrane (most cases).
5. Stoppage of the Eustachian tube on side with the pain (all cases).
6. Pharyngeal catarrh (all cases).
7. Follicular pharyngitis (one case).
8. Hypertrophic rhinitis (in case where supra-orbitalis was involved).
9. Post-nasal fibroma (one case).

Absent or not marked were:—

1. Tinnitus.
2. Vertigo.
3. Deafness.
4. Pain in the ear.

(In other words, there were no subjective symptoms pointing to the ear.)

Treatment:—

1. Iodine and glycerine to pharynx.
2. Nitrate of silver to nares; pulverized, one per cent.
3. Galvano-cautery to follicles and hypertrophies.
4. Local treatment to the middle ear, in the case of perforation.
5. Politzer—(frequently failed).
6. Eustachian catheter—(always relieved pain).

Prognosis Under Treatment.—Catheterization seemed in several cases to abort the paroxysm. Each inflation of the middle ear seemed to diminish the intensity of the paroxysms. From four to six inflations, in most cases, sufficed. Until the naso-pharynx was restored to the normal condition, the cephalalgia was prone to recur.—*Deutsches Archiv für Kl. Med.*, 40 Band., 2 Heft, 1887, p. 201.

ATTEMPTS TO BETTER THE CONDITION OF THE DEAF.

In the works of Braid it is recorded that a number of persons, deaf from birth, or from soon thereafter, after being hypnotized were enabled to repeat words spoken behind them,—that is, without lip-reading.

In 1884–5, Dr. Birkham repeated these experiments upon nine of the pupils in the Brunswick Institution for the Deaf and Dumb. In four of the cases the results obtained were worth the effort; in five they were *nil.* The experiments were conducted in the open air to eliminate the vibration of the floor as a source of error. The subjects were boys from twelve to fourteen years of age, and all were "stone deaf." The *séances* were generally at intervals of a week, and were but a few minutes duration? The procedure was as follows:—

The boy, after a thorough test of hearing, was put by the usual method into the "first stage" of hypnotism (*Obersteiner, Klin. Zeit. und Streitfragen*, 1887, Hypnotismus). Various sounds were made behind his back, of varying loudness. The vowel sounds, his name, the cracking of a whip, the sound of a bell, the clapping of hands, and the sound of a whistle, constituted the curriculum of this novel mode of education. After he had been awakened, the sounds were repeated (as before, behind his back and in the open air) and it was noted whether he perceived any of them. If he did, this sound was repeated as a drill frequently, until a later hypnotization should make further increase in his repertoire. If several attempts resulted only in failure, further efforts were abandoned. In the successful cases, one was enabled to recognize his name when called; one would answer to a certain meaningless sound; all could perceive certain vowels, and the bell and whistle added to their safety in crossing a railroad track.—*Berliner Klinische Wochenschrift*, February 7, 1887, p. 96.

A CASE OF SEPARATION BY NECROSIS OF THE OSSEOUS LABYRINTH.

Thomas Barr, M.D., reports a case of separation by necrosis of the osseous labyrinth of the right ear and its removal as a sequestrum from the external canal.

The specimens shown (Figs. 5 and 6) were removed on June 1st, from the right ear of a boy aged 11 years. It consists of an osseous labyrinth with its three divisions—the vestibule, semi-circular canals, and cochlea—clearly marked. . . . .

The boy from whom this sequestrum was removed had been affected for ten years with a profuse purulent discharge from his right ear, which had originated in an attack of scarlet fever when he was a year old. Facial paralysis on the corresponding side appeared shortly after the commencement of the discharge, and had continued ever since. He was taken to the Glasgow Ear Hospital on June 1st, mainly in consequence of a severe pain in the affected ear. A polypoid growth was seen to occupy the orifice of the ear; and on examination with a probe, a large, loose, sequestrum was felt in the external auditory canal. After the polypus had been removed by means of a snare, the sequestrum was, with some difficulty, extracted with a

pair of forceps. The external auditory canal was considerably dilated and its lining much excoriated, but after the removal of the necrosed bone the discharge quickly subsided, and within two weeks it had completely disappeared, while the interior of the ear had become healed. There was apparently at no time mastoid complication.

A number of cases are on record of individual sections of the osseous labyrinth, especially the cochlea, being exfoliated, but there are comparatively few cases recorded of an exfoliated labyrinth having its various parts so well represented as in this specimen. A pretty complete specimen (which was placed in the London College of Surgeons, but which has since disappeared) is mentioned in Toynbee's book, and is fully described in the eighth volume of the Pathological Society's "Transactions." Wilde also describes one in his "Aural Surgery" (page 377), and refers to it as "one of the most extraordinary pathological specimens of diseased bone perhaps in existence." In the *British Medical Journal*, June 15, 1885, Dr. Pye, of

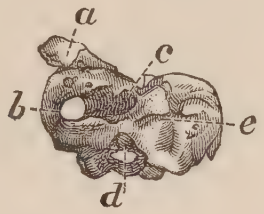

FIG. 5.

OUTER ASPECT OF SEQUESTRUM.

a. Superior semi-circular canal.
b. Horizontal semi-circular canal.
c. Fenestra ovalis.
d. Fenestra rotunda.
e. Outer wall of cochlea.

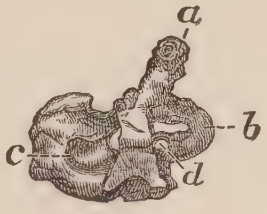

FIG. 6.

INNER ASPECT OF SEQUESTRUM.

a. Superior semi-circular canal.
b. Horizontal semi-circular canal.
c. Carious opening into the vestibule and scala vestibuli.
d. United extremities of the superior and posterior semi-circular canals.

London, describes a specimen removed from the mastoid process, somewhat similar to the one I have described. Another case is related in the same journal, by Dr. Phillips, of Bolton, on June 4, 1885. In his paper, Dr. Pye gives an interesting account of the more important recorded cases of necrosis of the labyrinth, both partial and complete.—*Lancet*, January 29, 1887.

COMMUNICATION ON PEROXIDE OF HYDROGEN.

C. Keller, of Cologne, in his former and recent communications on peroxide of hydrogen ($H_2 O_2$), gives a full history of the therapeutic experiments with this agent. He used it in a sixteen per cent. solution in several cases of chronic middle-ear suppuration, but found it to possess no advantages over the ordinary agents for cleansing the ear. He found its use advantageous in cases of pus accumulations, which are difficult to get at and remove by syringing, as the $H_2 O_2$ coming in contact with the pus not only renders it fluid, but the ozone, generated by the catalysis, disinfects parts not reached by the fluid itself.—*Op. cit.*, page 60.

A FATAL CASE OF PURULENT OTITIS AFTER OPERATION.

Bonnet mentions a fatal case of purulent otitis with phlebitis of the sinuses and pyæmia after parturition. The patient was twenty-four years of age. Four weeks after a forceps delivery she was attacked by a purulent otitis with intense febrile symptoms. Death after pyæmic phenomena occurred twenty-three days thereafter. The autopsy disclosed a phlebitis of the inferior petrosal and lateral sinuses as the cause of death. Bonnet attributes the ear affection to a lack of antiseptic precaution in treating a laceration in the cervix uteri.—*Annales des Mal. de l'Or. du Larynx, etc.*, No. 9.

ONE HUNDRED CASES OF OPERATIONS FOR OPENING THE MASTOID PROCESS.

A. Lucas and L. Jacobson report one hundred cases of operations for opening the mastoid process.

One side, 98 cases; both sides 2 cases; cured, 57; uncured, 31; died, 12.

Of 57 cases cured, 27 had an acute and 30 a chronic middle-ear suppuration.

In 12 cases ere was no external appearance of mastoid disease; and of 13, 10 were operated for retention of pus, and 2 for cholesteoma in the middle ear. "Indicatio vitalis" led to operation in 10 cases, in 8 of which the mastoid was externally healthy.

In the acute cases, the wounds closed in from three to twenty-four weeks; in the chronic cases, in from three to seventy weeks.

Average—Acute, seven; chronic twelve and a half—ten weeks.

Uncured.—Acute, two; chronic twenty-nine.

Deaths.—Acute, two; chronic ten.

Of the deaths, 11 had *post-mortems:* Sinus thrombosis and cerebral abscess, 3; sinus thrombosis and metastatic pyæmia, 1; tubercular meningitis, 2 (one of which had sinus thrombosis and pyæmia); purulent meningitis, 4 (of which one had sinus thrombosis, and one with ditto, and cerebral abscess and pyæmia). In all 12 cases death was traceable to the disease of the ear, and in none due to the operation. In one case, convalescent, there occurred a fracture of the skull (fall from a window) which was followed by purulent meningitis.

Operations were made with chisel, hammer, and curette (Löffel), and, although in eight cases the sinus transversus was opened, and in one the dura mater was exposed, these accidents might have been avoided.—*Centralbl. für Med. Wissenschaf.*, No. 5, 1887.

A NEW METHOD OF ESTABLISHING PERMANENT ARTIFICIAL PERFORATIONS OF THE MEMBRANA TYMPANI.

McKeown describes a new method of establishing permanent artificial perforation of the membrana tympani, similar to the one that has been proposed by Von Troeltsch. He forms a triangular flap with

the base downwards. The free apex of such a flap will fall downwards and by means of extravasated blood, etc., become agglutinated to the lower portion of the drum membrane. Such an opening will remain patent for weeks or even months. The author has carried out this method in order to verify his diagnosis in cases of affection of the middle ear, but mostly for the purpose of dealing directly with the hypertrophic changes of the lining of the membrane of the tympanum. The majority of such cases showed more or less improvement, a few remained stationary, and one became worse.—*Centralbl. für Med. Wissensch.*, No. 5, 1887.

ASPERGILLUS NIGRICANS.

Mr. Story exhibited and described microscopic specimens of aspergillus nigricans, which he had removed from the auditory meatus of three individuals suffering from deafness and inflammation of the external ear. He also showed a fourth fungus of an undetermined character, but most probably one of the aspergillus tribe. Mr. Story stated his conviction, that the fungi were the cause, and not the consequence of ear disease, a view which has been advocated by some writers on the subject. The president said he had seen a few cases of aural fungi. In one of these there was intense pain in the left ear, and the meatus was partly blocked up with a white, cottony material. A brother of the patient was at the same time being attended by Mr. Swanzy, of Dublin, for otomycosis, contracted while lylng on hay or damp vegetable matter in the summer time, and he, Walter G. Smith, M.D. (the president), asked Mr. Swanzy to see his case. It was impossible to resist the evidence that the fungus was the direct cause of the disease. The invasion by it of the deeper tissues had been successfully proved. He would ask Mr. Story whether, in any of his cases, he had noticed any special cause, which led to the production of the fungus, such as dealing with yeast, or any contact with decaying vegetable matter. The aspergillus, he believed, was not confined to the ear, but was also occasionally found in the bronchial membranes.

Dr. Mapother mentioned, that in the year 1880 he, himself, had an acute attack of otomycosis. He had never suffered before nor since with any aural disease. One night he went to bed, in a house in the suburbs of Dublin, with his hearing perfect, and in the morning he awoke almost perfectly deaf. He bore the affection for one day, and on the next consulted Mr. Swanzy, who, with forceps partly, and partly with the syringe, removed a quantity of white cottony material from the ears. The only sensations he had beside deafness, was one of stuffing, as if something like cotton wool was being pushed in both ears. The material removed from his ears was examined both by himself and his friend, the late Dr. Richardson, and they both came to the conclusion

that it contained aspergillus. Which of the seven or eight different forms it was, he could not say, but, as well as he remembered, it was like the first form described by Mr. Story. The shape of the growth resembled the aspergillus, or holy-water sprinkler, used in the Roman Catholic Churches. After the extraction of the fungi from his ears, and a week's washing with sulphuric acid solution, they disappeared, and never grew again. He had observed that the wall paper of the room next to which he slept, was almost completely separated from the wall by damp, and he believed that it was that which had produced the fungi. Since the wall had become dry no similar attack of mycosis had occurred to any one else occupying the room. Mr. Story said he remembered being consulted by a farmer, who, after sitting up all night with a sick cow, had stuffing and pain in his ears, caused by aspergillus the next morning—*British Medical Journal*, January 29, 1887.

[In the treatment of aspergillus nothing has been found to act so definitely and promptly as alcohol pure, which may be said to be a specific. Use the *spiritus vini rectificatissimi.* C. S. T.]

SOME RARE FORMS OF TINNITUS

Laurence Turnbull, in his article on some rare forms of tinnitus aurium, subjective and objective, describes the clinical features of five cases of tinnitus aurium reported by Arthur Hartmann. One case of objective tinnitis is of special interest, as being due to spastic contractions of the muscles of the Eustachian tube. A simultaneous contraction of the velum palati was noticeable, with the aural tinnitus. The application of the constant current produced a recovery.—*Arch. Otol.*, xvi., p. 56.

RINNE'S TEST.

Dr. Thomas Barr, of Glasgow, in a paper on "Bone Conduction of Sound, and the Value of Rinne's Test in the Diagnosis of Diseases of the Nervous Structures of the Ear," defines Rinne's test as consisting "in applying a vibrating tuning-fork (C with clamps) with moderate pressure to the surface over the mastoid process; and, after holding it in that position until the sound has completely died away, transferring it rapidly to the air opposite to, but so as not to touch, the orifice of the ear. If the note of the tuning-fork again becomes audible, with the prongs in the latter position, the air-conduction of sound is said to predominate over the bone-conduction—the condition in normal hearing. When, on the contrary, the sound of the tuning-fork is inaudible after its transference from the mastoid process to the air, the bone-conduction is then said to predominate over the air-conduction."—*Arch. Otology*, vol. xvi.

UNIMPAIRED HEARING NOTWITHSTANDING CALCAREOUS DEPOSITS ON THE DRUM MEMBRANE.

Burnett concludes, from clinical observations: (1) That structural changes in the tympanic membrane, particularly calcareous deposits of a very extensive nature, may exist without impaired hearing. (2) Loss of continuity in the tympanic membrane does not necessarily interfere with its function, provided that the ligamentous support, which it affords to the chain of ossicles, is not impaired.—*Arch. Otol.*, vol. xvi., page 64.

CHRONIC RHINITIS AND CHRONIC AURAL CATARRH.

Burnett believes that chronic rhinitis predominates over pharyngitis as an etiological factor in chronic aural catarrh. The hypertrophic and atrophic forms have each their aural signs and symptoms. Tinnitus is more marked in the atrophic form. The remedies should be addressed to the nasal mucosum. They are cleansing agents and astringents for the hypertrophic form, and cleansing agents and stimulants for the atrophic. Nitrate of silver should never be used in the former, but it is useful in the latter.—*Arch. Otol.*, page 72.

MISCELLANEOUS.

Ukermann reports three cases of relaxation of the drum membrane through misuse of the air douche. They were treated by galvanocaustic puncture. The patients were children from five to ten years of age, and suffered also from adenoid vegetations of the naso-pharyngeal space.—*Arch. Otol.*, page 64.

M. Foucher, in an exhaustive article on follicular inflammation of the external auditory canal, advises early and free incision, if such can be done without ether and chloroform, cocaine being of no avail in the pain of operation.—*L'Union Méd. du Canada*, March, 1887.

Professor Hartmann recommends a ten per cent. solution of phénol in glycerine, by instillation, in acute otomycosis, med.—even if the exudation has already taken place. M. Röhrer, of Fariet, uses twenty per cent. solution.—*La Semaine Méd.*, April, 1887.

Von Guranowski (*Gazeta Lékarska*, No. 20, 1887) reports a case of chancroidal auto-infection of the middle ear; and in *Vratch*, No. 28, 1887, records a similar infection of the nasal mucosum.

A. von Eitelberg reports a case of polypus of the tympanum with imperforate membrane. Upon paracentesis the polypus came to light. —*Zeitschr. für Ohrenheilkunde*, Bd. xvi., f. 211.

J. Baratoux proposes skin-grafting as a means of closing openings in the membrana-tympani. F. Berthold uses a piece of the vitelline membrane of the hen's egg.—*Le Progrès Méd.*, January 1, 1887.

Mr. Charles Atkin reports two cases of "otitis media" caused by vomiting. There was undue patency of the Eustachian tubes.—*British Medical Journal*, February 12, 1887.

Sahli, in experimenting upon salol, has shown that a dosage of even 90 to 120 grains, does not produce tinnitus, as would salicylic acid in equal amounts.—*Wiener Med. Presse*, 1887.

Kirk Duncanson mentions mumps as a cause of deafness coming on suddenly. He adds a new case to those recently published by others, of sudden deafness in consequence of a severe attack of the mumps. Contrary to general expectation, according to which the deafness acquired in this way remains unchanged, Duncanson's case, in the course of time, showed a slight improvement.—*Arch. Otol.*, vol. xvi., p. 72.

LARYNGOLOGY AND RHINOLOGY

UNDER THE CHARGE OF

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ELECTROLYSIS IN THE TREATMENT OF CHRONIC RHINITIS.

Mermod, of Yverdon, Switzerland, reports excellent results in two cases of chronic rhinitis treated by electrolysis. In the one, complicated with extensive ulceration, many remedies, including galvanocautery, had been tried without effect. In the second case, a profuse pseudo-membrane was constantly being formed, resembling greatly that of diphtheria, but not presenting the microscopical characters of that disease. After a few applications in each case the trouble completely disappeared. The author refers to a number of cases presenting equally favorable results, and ascribes these rather to the special action of the current upon the circulation, owing to the increased nutrition of the diseased tissues, than to chemical metamorphosis.

The method of application is extremely simple, a common continuous current battery serving every purpose. The applicator of the positive reophore should present as broad a surface as possible, while that of the negative should be replaced by a needle, such as that of a Pravaz syringe. For the anterior nasal cavities a rubber speculum had best be used to insure insulation in case of accidental contact during introduction. The positive pole is applied on the cheek as near the needle in the cavity as possible, to avoid diffuse distribution of the current. For operations in the naso-pharynx it is applied over the ligamentum nuchæ.

The mucous membrane should be completely traversed by the needle and the circuit closed during four or five seconds, this being repeated a number of times while the needle is left *in situ*. A slight crepitation is heard, and a little white foam is observed to emerge

around the needle. A weak current will usually suffice. When this is too strong giddiness is experienced, accompanied by pain in the superior maxillary region.

The only drawback to this method of treatment is the pain, which is sometimes very great. A twenty-five per cent. solution of cocaine, however, applied two or three times before each application materially diminishes it. Four or five sittings are usually sufficient for a cure.—*Revue Médicale de la Suisse Romande*, No. 2, 1887.

A CASE OF SEVERE SUPRA-ORBITAL NEURALGIA, DUE TO HYPERTROPHIC RHINITIS.

G. Finne reports an interesting case in which a severe neuralgia, which could only be momentarily relieved by the medicinal treatment, was completely cured by local applications to the nasal membrane. Upon examination, the membrane covering the inferior turbinated bone was found somewhat atrophied and very sensitive to the touch, while the breath was somewhat fetid. Cleansing, followed by energetic cauterizations with chromic acid, caused immediate cessation of all symptoms.—*Norwegian Journal of the Med. Sciences.* (Report of Dr. F. Ecklund, Corr. Ed.)

TREATMENT OF CERTAIN FORMS OF OBSTINATE EPISTAXIS.

Professor Verneuil recently spoke at length, in one of his lectures, upon this important subject, suggesting measures which at first he thought were original with himself, but which were found in the course of researches to have been recommended by Galen. Quickly passing in review the different etiological factors of the great number of cases that had been under his care, he attributed the successful results obtained in them much more to the internal remedies administered than to the local measures, astringents, styptics, etc. In three cases both lines of treatment failed utterly, and their gravity increasing every moment, he abandoned the routine treatment and sought the remote cause of the bleeding. In the first case he located it in the liver, which he found atrophied, and, although no pain on pressure existed, the avowed intemperate habits of the patient suggested a diagnosis of beginning cirrhosis. The epistaxis until then had resisted every measure, even plugging. The administration of all remedies, local and general, was stopped, and a large blister, ten centimetres square, was applied over the liver. The bleeding ceased, and no recurrence took place, although the patient was kept under observation for a long time. In the second case the nasal hemorrhage was the result of a kick from a horse. No fracture being detected, the bleeding was plugged successfully. The next day the epistaxis returned, but on the other side, which was also tamponed. After a temporary arrest, the bleeding reappeared with great force, accompanied by a marked

rise in the temperature. Upon withdrawing the tampon (which had been introduced three hours before) a fetid odor was exhaled by the patient, suggesting as a cause of the pyrexia a septicæmia due to the absorption of decomposed blood, which had accumulated in the cavities. Gentle washing of the cavity relieved the local trouble, but the hemorrhage recurred at intervals, notwithstanding all measures tried, internal and local. Remembering his first case, Professor Verneuil ascertained that the patient had been subject to nosebleed during his early life, and that he was of intemperate habit. The liver was found atrophied, and a large blister applied over it caused, as it did in the other case, complete disappearance of the trouble. The third case was one of chronic nephritis, complicated with slight cardiac and marked hepatic derangement. Here, again, the epistaxis resisted all measures, including plugging, and relief was only obtained by means of a blister over the seat of the liver, combined this time with the internal administration of quinine.

As a result of these observations, Professor Verneuil concludes:—

1st. That latent and still benign affections of the liver can cause and maintain rebellious epistaxis.

2d. That the counter-irritation obtained by means of a large blister over the right hypochondrium, is the best means at our disposal for its treatment.—*La Tribune Médicale*, May 8, 1887.

NEW METHOD FOR THE REMOVAL OF NASAL POLYPI.

V. Lange, of Copenhagen, removed polypi occupying the posterior nares, in four cases, by the introduction, through the anterior nares, of an instrument somewhat like a button hook, with a long handle. The hook was adjusted around the pedicle, with the assistance of the index finger of the left hand introduced behind the soft palate, and slight traction sufficed to detach the growths.—(Report of Dr. Holger Mygind, Corr. Ed.)

BENZOATE OF SODIUM IN LARYNGEAL DISEASES.

Dr. Albert Ruault, in a paper read before the Société Clinique of Paris, lately alluded to the advisability of using benzoate of sodium, made with benzoic acid obtained from benzoin, instead of the ordinary preparation made with benzoic acid obtained from chloride of benzyl. The deleterious effects of the latter, observed by himself and a number of other physicians, in a few cases, were general malaise and nausea, and, in some, insomnia; the nausea being probably encouraged by the sweetish taste possessed by the drug. Unfortunately, benzoate of sodium obtained from benzoin is very scarce. The results obtained with the latter were, besides, more constant, while its agreeable taste rendered its administration easy.

For the treatment of ordinary cough, the result of cold, he found it much more effective in persons of habitual good health than in those who were suffering from some chronic pulmonary ailment. In doses of six or seven grammes per day, the cough usually disappears in two or three days. He has lately treated three cases of acute laryngitis of from twenty-four to thirty-six hours' standing. In the first case the congestion of the vocal bands was marked, and the hoarseness very great. On the fourth day all objective and subjective symptoms had disappeared. Several days after, however, the patient was chilled, returning from a ball, and all the symptoms returned with renewed vigor. The same treatment was instituted with the same results. In the second case, four days were also sufficient to complete the cure. In the third, a singer, there was, besides, granular pharyngitis and great congestion of the entire laryngeal cavity. Tincture of aconite was administered in connection with the benzoate of sodium, nine grammes of the latter being administered during the forty-eight hours that it took to bring about recovery.

The beneficial action of the drug is felt almost immediately, this being especially marked in the exacerbations of chronic pharyngitis and tonsillitis. Not less than six grammes per day should be administered to adults, in doses of fifty centigrammes.—*La France Médicale*, June 7, 1887.

A SIMPLE METHOD OF FACILITATING DEGLUTITION IN LARYNGEAL PHTHISIS.

Dr. R. Norris Wolfenden, in a note to the *Lancet*, describes a novel and effective method of procuring deglutition when this is rendered difficult by extensive ulceration of the epiglottis, taught him by one of his patients in the last stage of laryngeal phthisis, and in whom the epiglottis had more than half disappeared from ulceration. By lying, face downwards, upon a couch, with the feet higher than the rest of the body, and the head and arms hanging free over the end, he took a large tumblerful of water in both hands, and placing one end of a piece of rubber tubing, about six inches in length, in the fluid and the other in his mouth, he drained off the contents without stopping, and with the greatest ease and comfort.—*London Lancet*, July 2, 1887.

HOT WATER IN ACUTE LARYNGITIS.

Dr. A. H. Buckmaster, of Brooklyn, reports a case in which the use of hot water had arrested an attack of dyspnœa, due to submucous infiltration, sufficiently great to induce cyanosis. The patient, a stout Irish girl, eighteen years of age, had had sore throat for a couple of days, complicated with hoarseness and dysphagia. At midnight she was breathing with the greatest difficulty, and the cyanosis becoming marked, tracheotomy became imminent. The thought of

causing an unsightly scar in the front part of the neck, however, suggested the trial of some other method of relief, and Dr. Buckmaster determined to try applications of hot water. "A rubber blanket was quickly spread upon the bed, and the patient placed so that the head was lower than the shoulders. A large supply of hot water, at about 120° Fahr., was thrown against the œdematous tissues by means of a Davidson syringe. The head was turned on its side, so that the water could easily return and be carried by the sheet into a pail. At first, this procedure caused the patient to attempt to swallow, but it was quickly overcome; the breathing became easier, and at the end of half an hour the distressing symptoms had disappeared."

The discussion which followed the reading of the paper, elicited an important point which had not been alluded to, the fact that it was not necessary to apply the hot water directly to the seat of the trouble to obtain the desired result. The straight tip of the Davidson syringe could only eject the water against the wall of the pharynx, while the position of the patient did not allow the fluid to run down behind the larynx, thus giving it the benefit of contact with its external wall. The water should not be used a a higher temperature than 120° Fahr. —*New York Medica Journal*, January 15, 1887.

THE ETIOLOGY OF GLOBUS HYSTERICUS.

Mr. Lennox Browne, of London, recently read a paper before the Philadelphia County Medical Society, in which he stated that a systematic laryngoscopic examination of every patient who came to him complaining of the sensations known as *globus hystericus*, led him to conclude that very few cases were of a hysterical character, and that it was, with hardly an exception, but the symptomatic expression of an objective cause. The laryngoscopic examinations of his cases showed that there was :—

1. A varicose, and even truly hemorrhoidal condition of the veins at the base of the dorsum of the tongue, sometimes at the under surface and sides, in which last case it may be symptomatic of mitral insufficiency, or of severe hepatic derangement, or even of cerebral lesion. There is often a similar varicose state of the vessels in the superior surface of the epiglottis.

2. An enlargement of the circumvallate papillæ at the back of the tongue, causing the epiglottis to be hindered in its movements.

As concomitant symptom, there is distinct fullness of the thyroid isthmus, which, although not generally apparent to the eye, is felt in passing the hand gently over the front of the neck. Pressure over it causes the sensation of *globus* to appear. In such cases there is usually, also, habitual constipation, and the evidences of a varicose diathesis, hemorrhoids, varicose veins, etc.

As to treatment, Browne recommends chalybeates and aperients, with digitalis and ergot, as may be indicated, and solutions of chloride of zinc or perchloride of iron, applied locally. Lozenges of chloride of ammonium are also recommended. The varicose vessels should be cauterized by means of the galvano-cautery point, sealing each individual bloodvessel.—*Medical News*, October 8, 1887.

INHALATIONS OF THE FUMES OF NITRATE OF SILVER IN DISEASES OF THE RESPIRATORY TRACT.

M. Storch, following the suggestions of several Norwegian physicians, employed the vapors obtained by dissolving nitrate of silver in nitric acid in diseases of the upper and pulmonary air passages. Very favorable results were obtained, especially in cases complicated with emphysema or chronic bronchitis.—*Hospitalstidende*, May, 1887. (Report of Dr. F. Levison, Corr. Ed.)

MOGIPHONIA.

At a meeting of the Berlin Society of Internal Medicine, Prof. B. Fraenkel related a number of cases of this neurosis, which seems to only affect professionals. It is divided into the three forms, the spastic, the tremulous, and the paralytic. In the first, deficient coordination is the preponderating cause, through which the larynx is contracted spasmodically, inducing a characteristic change in the voice and difficulty of respiration. Volition seems, in these cases, to have lost its power over the sound-producing organs; although the lips are moved, no sound is emitted. In the tremulous form, a tremor seems to pervade the emission of the voice which cannot be controlled. Of the third variety, Fraenkel observed six distinctly characterized forms, which all have this in common, that the patient loses the voice when fatigued. The cases presented were those of four professional singers, one male and three females—a female school teacher and a priest. One of the singers was a fine, healthy girl of great promise, in whom the usual nervous excitability generally observed in artists was present, and whose membrane upon examination showed but slight congestion. Her voice, full and melodious at first, would gradually lose its volume, until it became impossible for her to produce a note, although the speaking voice remained unaffected. The other cases, affected in about the same way, were also healthy, and did not present, any more than the first case, the least evidence of the presence of hysteria, or of any other neurosis. Electricity seemed to be of no avail. In one case, rubbing the neck from above downwards forty to fifty times, after lubricating its surface with lanolin, produced a satisfactory result after six weeks of treatment.

In the course of the discussion, Dr. Tobold stated that he not infrequently observed the trouble among teachers, clergymen, and

officers in blooming health, and that he obtained good results with the constant current. He was obliged, however, to continue the treatment from six to nine months. Dr. Krause had tried with success a well-known method, resorted to by singing masters, which consists in "speaking into the mouth." When the patient has learned to do this, the results are most satisfactory.—*Deut. Medic. Zeitung*, January 24, 1887.

TONSILLITIS IN CHILDREN.

W. E. Green, in a paper read at the Ryde Meeting of the Isle of Wight, of the British Medical Association, on the above subject, states that in administering guaiacum alone he had not found the desired result. He was then led to combine aconite with it, and found this treatment increasingly efficacious. Experience has gradually taught him to give the drug more and more frequently, and now believes that nine out of every ten cases should be aborted by their use, provided the case is seen within the first forty-eight hours. His present prescription is :—

℞.	Tr. aconiti	. . . . .	℥ij.
	Tr. guaiaci	. . . . .	℥ss.
	Glycerinæ	. . . . . ad	℥j.

Twenty drops every hour in sweetened water till easier, then every four hours till well. The patients experience relief at the first dose, which increases with each successive one.—*British Medical Journal*, May 28, 1887.

BICARBONATE OF SODA IN TONSILLITIS.

Dr. W. J. Baker, of Ferozepore, Punjab, reports having tried, in a large number of cases, the treatment recommended by Dr. G. Partagas in 1885, consisting in the local application of bicarbonate of soda before the appearance of dysphagia in the course of the disease. He found that it not only gave great relief in the early stages, but also when suppuration seemed inevitable. Many patients, who were quite unable to swallow—even liquids without acute suffering—were, in the course of an hour, almost entirely free from pain, and in the course of four or five days cured. The patient, after having moistened the tip of the index finger, dips it into the powder, and then rubs it gently all over the tonsil. This should be repeated every five minutes for half an hour, then once every hour for the rest of the day.—*British Medical Journal*, April 9, 1887.

AN HEMORRHAGIC PAPILLOMA.

Rafael Ariza refers to the history of a woman in whom a laryngoscopic examination revealed a large mass, oblong antero-posteriorly and pyriform, situated over the left vocal band. Its surface was gran-

ular, reddish in color, and its prominence over the glottis was sufficiently great to reduce materially its size and cause dyspnœa. Upon touching the tumor a violent attack of glottic spasm occurred, from which she rallied with difficulty after expectorating considerable blood. In the portion of the tumor touched by the instrument was found a depression the size of a lentil, from which blood was oozing. The spasm recurred at the second sitting, with slight hemorrhage, after merely passing the forceps beyond the upper portion of the epiglottis, but soon disappeared. The third attempt was again followed by spasm, but this time of a less violent form, and a piece of the tumor was successfully removed, with some bleeding, after which it completely collapsed. The growth was found to be a papilloma.—*Revista de Laryngologia, etc.*, of Barcelona, February, 1887. (Report of Dr. R. de la Sota, Corr. Ed.)

DERMATOLOGY.

UNDER THE CHARGE OF

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ELEPHANTIASIS ARABUM.

Pietrzikowski gives an account of three cases of elephantiasis of the lower extremities, treated by ligature of the crural artery, in Gussenbauer's clinic, with favorable results.

The first case was that of a laborer, 17 years of age, who had injured his left leg in jumping from a hay-rick. Within a day or two the leg began to swell, and the enlargement gradually extended up to above the middle of the thigh, with the usual elephantiasic symptoms of warty skin, flow of lymph at times, etc. Compression and rest having been tried in vain, the crural artery was ligated in two places, and divided between the points. Lister's compressive dressing was used, the wound healed by first intention, and the patient soon left the hospital. Two years later he applied for relief from a muscular abscess of the left leg, when the limb was found to be in good condition, and without enlargement.

[There is some question as to this being a true case of elephantiasis Arabum, and not rather one of those allied lymphatic inflammations due simply to traumatic inflammation.—A. V. H.]

The second case was that of a woman of 21, in whom similar symptoms occurred in the right leg and thigh, without any referable cause. A similar operation was performed with a favorable result. Two years later the patient died of tuberculosis.

The third case was that of a woman of 57, who, after a labor, at

32 years of age, had begun to suffer with an increase in volume of the left leg, which, in the course of years, grew to an enormous size, and also showed a number of papillomata. After destroying these with the thermo-cautery, the crural artery was tied. As in the other cases, the wound healed by first intention, and a third favorable case was thus recorded.

Pietrzikowski adds the statistics of the operation. Fifty-seven cases are reported, of which 5 died—all before the introduction of antisepsis. In 25 cases a diminution in the volume of the limb was observed years later. In 8 cases improvement was observed. In 10 cases a relapse took place, while in 1 case no result was observed. In another, gangrene ensued, necessitating amputation. In 7 cases the subsequent history could not be obtained.—*Präg. Med. Wochens.*, 32–34.

Dagnino, of Caracas, S. A., gives an account of three ligations of the popliteal artery for elephantiasis of the leg, two in the same individual, which were successful. His article is elsewhere a painful exhibition of the confusion caused by the old nomenclature of elephantiasis, for two such entirely distinct affections as leprosy and elephantiasis Arabum.—*Therapeutic Gazette*, February 17, 1887.

THE TREATMENT OF LUPUS.

Dr. H. G. Brooke, in an article in which he reviews and criticises many of the remedies which have been, or still are used in the treatment of lupus (vulgaris), recommends salicylic acid, which has a selective influence upon the lupus nodules. Salicylic acid has found an extensive use in dermato-therapeutics, owing to its almost unique property of destroying the horny epidermis. In the normal skin, this action never extends beyond the stratum lucidum, but as soon as the living cell has passed through the chemical transformation with which this layer is identified, and becomes converted into a dead and horny substance, it becomes incapable of resisting the effects of the acid, and is by it converted into a white, friable, almost curdy layer, which is easily stripped off. The lupus tissue also shares, in a marked degree, this inability to resist the acid, whilst the healthy corium is impervious to its destructive influence. If, then, by the removal of the overlying epidermis the nodules of lupus granuloma are laid bare, they are quickly eaten out from the midst of the healthy corium, and in their room an empty, hollow pit is left. A patch of skin, which is interspersed with lupus tubercles, presents, therefore, after the employment of salicylic acid, the appearance of a raw surface, riddled with holes, as if it had been worm-eaten. If the action has been thorough, the whole of the morbid growth, including its prolongations, will have been completely cleaned out, and, on the healing of the wound, a good,

smooth scar will result, free from aftergrowth. The same drawback, however, accompanies the use of salicylic acid which is incidental to the use of all caustics, that is, more or less intense painfulness. This has been obviated, to some extent, by Unna, who employs an admixture of creasote, in the proportion of two parts, by weight, to one of salicylic acid. Pain is complained of for about fifteen to twenty minutes after the application of the mixture, but after this time complete anæsthesia ensues, and continues unbroken until the application of the next dressing. Dr. Brooke uses Unna's gutta-percha plasters, and also the following ointment:—

℞.	Acid. salicylic.		ʒj.
	Creasoti		ʒij.
	Adipis et ceræ . . .	āā q. s. ad	ʒviij.

The mass should be somewhat stiff, and when warmed gently and mixed well gives a soft ointment, which may readily be spread upon lint. Of the two, Brooke prefers the ointment.

A preliminary scraping, or burning or clearing out of the growth, either with the sharp spoon or the nitrate of silver stick, is a most important part of the procedure in all but very superficial cases. Whatever caustic be applied, it is important that its action should be thorough, sharp, and incisive. If undestructive, it is simply irritating, and not only causes unnecessary pain, but, by inflaming the spots, tends directly to the further spread of the disease.

The absorbents and resolvents which were formerly so largely employed, proved to be inefficient to cope thoroughly with the disease. Among them, the mild mercurial ointments were the most useful, and they certainly, in Dr. Brooke's opinion, help to promote absorption of the lupus infiltration. He has seen superficial patches of lupus disappear entirely under the application of an ointment containing twenty grains of the oleate and twenty-five grains of salicylic acid to the ounce of lard. It does not break the skin and is painless, so in this case the salicylic acid, like the mercury, is presumably absorbed directly. It may be applied as a preliminary to operative treatment with great advantage, for after the redness and swelling have subsided, the single tubercles and nodules, being of brownish or yellowish-brown color, stand out clearly against the white skin, and are so much the more readily discernible.

Doutrelpont, with a view to killing the bacilli in lupus, has employed solutions of mercuric bichloride, but this procedure has failed entirely in Brooke's hands. Moreover, the application of the bichloride solution, even when highly dilute, is very painful.

No one plan, in Brooke's opinion, is so effective as the combination of a preliminary mechanical removal or destruction of the bulk

of the diseased tissue, followed up by the application of a caustic which has a selective action on the diseased, as apart from the healthy tissue. Even then it is impossible to insure a perfectly thorough destruction of the whole of the new growth at the first operation, but the ground must be gone over again repeatedly.

Some help may undoubtedly often be gained by hygienic measures —the exhibition of iodide of iron, cod-liver oil, and arsenic—but the mainstay of the treatment remains in a thorough and careful local treatment. Knowing, as we now do, the possibility of the fatal inoculation of tuberculosis, to which lupus even spontaneously may give rise, we should cease to regard it as a mere cosmetic disfigurement, but recognize it as a malignant disease, and treat it with all the care which such a condition demands.—*Provincial Med. Journal*, January, 1887.

LICHEN RUBER ACUMINATUS.

A discussion is at present going on between the French and German dermatologists as to the existence of lichen ruber acuminatus. Unna has recently recorded a series of cases which he claims to correspond with the acuminate lichen ruber of Hebra. The papules in these cases were minute, of the size of a mustard seed, conical pointed, and bearing on their apex a small scale, which corresponds to the orifice of the hair follicle. They itch much. At the commencement they appear as red, scaly points, widely separated from each other. They increase in number, and when, in the course of the disease, the skin which divides them becomes red, swollen, and thickened, they run together, and give rise to extensive patches of a bluish-red color, slightly scaly, and extremely itchy. The individual papules are now swallowed up in the general engorgement of the papillary body, and are no longer perceptible to sight or touch. On the touch one finds only a simple pityriasis; on the palms and soles, flattened, transparent papules; on the tongue, irritable erosions. It is the rule that lichen acuminatus has an acute course; it frequently supervenes after profuse perspirations. Unna adds, that untreated, in a few weeks it assumes a chronic phase, the nails begin to be affected, the hair falls off, the patient emaciates, and in the course of some years dies of marasmus or of phthisis pulmonaris. Arsenic internally or subcutaneously cures it in some weeks or months; but Unna claims, as the most efficacious and agreeable method, the inunction of a salve containing carbolic acid and corrosive sublimate.

Brocq regards Unna's cases as the same as those called in France pityriasis rubra pilaris.

In this connection it may be interesting to note a case of lichen ruber as observed by a French authority. The patient was a woman fifty years of age, showing a peculiar eruption, which she attributed to

a moral shock received some time previously. The earliest symptom was general pruritus over the entire body, followed by an eruption located particularly about the hairs, and consisting of small, dark, discolored elevations, with a smooth, varnished surface, and of a polygonal form. The surface was flattened, not acuminate. The eruption at first sight closely resembled syphilis.

The reporter, having decided the nature of the eruption, goes on to say that lichen planus is, itself, not a grave affection, in spite of the severe itching which accompanies it. It can always be cured, and never returns again. It has no visceral location, nor is it ever found upon the face. However, it may show itself in the mouth, in the neighborhood of the velum palati, giving rise in this locality to small, white patches, which disappear only after a long time, but which neither give rise to pruritis nor to any other symptom. In this respect it is like eczema.

The treatment of the disease, according to this French author, is practically specific, and consists in the administration of arsenic in large doses, preferably by hypodermic injection. A solution is prepared, of which each drop represents, for example, a milligramme (gr. $\frac{1}{60}$) of arseniate of sodium :—

℞. Sodii arsenitis . . . . . gr. ij.
Aquæ . . . . . ♏cx.

One drop of this solution is added to half a hypodermic syringeful of distilled water, and injected. The strength of the solution may be increased to three drops to the half-syringeful, but if stronger than this the solution becomes irritating. Two hypodermics may be given in one day, however.—*Annales de Derm. et de Syph.*, August and October.

PURPURA FULMINANS.

Ström was called to see a child two and a half years of age, in good general health, who, a fortnight previously, had been attacked by an affection which seemed, from the description, to have been a mild attack of scarlatina, and which, at the end of four days, was deemed cured. A few hours previous to Ström's visit, the child began to complain of pain in the right leg, which rapidly swelled and became livid as far up as the knee. At the same time feverishness, headache, and a slight sero-sanguinolent nasal discharge was observed. The patient was ordered internally quinine, with fomentations with lead-water. By the next evening the child was unconscious, or nearly so. The right leg continued firm, swollen, and discolored; large, superficial, purplish ecchymotic patches could be observed on the calf, the general surface of which was of a bluish or blackish-red, resembling a commencing gangrene. The upper border was sharply defined just below

the knee. The sensibility of the skin was markedly diminished or abolished over the foot, and also over the lower part of the leg, but hyperæsthesia was observed in the diseased skin toward the line of demarcation. Extensive, irregular, confluent ecchymoses also existed in the left calf, posterior part of both thighs, and over the loins. In addition there were ecchymotic patches on the forearms and on the left cheek; the hands were livid. The radial pulse was imperceptible, but the heart could be heard beating strongly. Lungs normal. The infant had vomited in the morning and on the day previous. The urine was clear, but strongly albuminous. There were no hemorrhages, excepting that from the nose noted above. Death ensued the following day. No autopsy.

In comparing this case with those mentioned by Henoch (*Berl. Kl. Wochens.*, No. 1, 1887), it is to be observed (1) that the hemorrhagic extravasations were confined to the skin, the trifling discharge from the nostrils hardly counting. (2) That the development and confluence of the hemorrhagic extravasations took place with typical rapidity. (3) The absence of bullæ could be accounted for by the rapid course, terminating fatally, of the case.

The author concludes that the case was one of purpura fulminans, and, with Virchow, exhorts to a microscopic examination of the ecchymotic foci, with the view to finding bacteria, since the parasitic nature of the disease seems to him beyond question.—*Journal of Hygiene and Therapeutics*, No. 5, 1887, Gothenberg, Den.

Lund has reported a somewhat similar case, in which a child between six and seven years of age was attacked by scarlatina of mild type. Convalescence being nearly established, the child had quitted its bed, but was seized by a relapse, accompanied with high fever, and with the outbreak of ecchymotic patches, at first on the lower extremity, but later over the shoulders and elsewhere, constantly increasing in number and size. The patient died in about forty-eight hours after the first appearance of the ecchymosis.—*Norwegian Jour. Pract. Med.*, March, 1887. (Report of Dr. F. Ecklund, Corr. Ed.)

LACTIC ACID IN LUPUS.

Wichmann dips a bit of absorbent cotton in lactic acid, taking up just enough to prevent dripping, and applies it to the lupus ulcer. Or he prepares, extemporaneously, a paste of powdered salicylic acid with lactic acid, and applies a thin layer of this to the surface. The application is covered with gutta-percha tissue, and bandaged, the surrounding healthy skin having been protected by ointments, liquid gutta-percha, etc., and remains untouched for twenty-four hours. After this the ulcer is disinfected, iodoform gauze dressing applied, and covered as before, remaining this time untouched for two days. The lactic acid

is once more applied, and this procedure continued until the diseased tissue is destroyed. Lactic acid is a feeble caustic, but for this very reason is convenient to use, when our object is to preserve as much tissue as possible for cosmetic effect, as on the face.—*Jour. Pract. Med. Christiana*, January, 1887. (Report of Dr. F. Ecklund, Corr. Ed.)

MYIASIS IN MAN.

On account of his earlier communications on this subject having failed to obtain credence, Sandahl has brought to his support several cases, recently observed, together with some observations from medical literature. These having been brought forward, Lindquist spoke of his experience in the occurrence of gastrus and œstrus in domestic animals. The larvæ of these species are swallowed with the food, and have been found wriggling about alive in the intestinal canal. Lindquist thinks that the chief reasons for the survival of these larvæ, in presence of the gastric juice, is the elevated temperature of the body, and their rapid passage through the intestinal canal, because of increased peristaltic action, resulting from the irritation produced by the larvæ themselves.—*Hygeia*, No. 3, 1887; *Trans. Swedish Med. Sur.;* see also article on "Myiasis Externa Dermatosa," by Gustav. Joseph, *Monatshefte f. Pr. Derm.*, 1887, Nos. 2, 3, and 4.

FREQUENCY OF PARASITIC DISEASES OF THE SCALP IN THE PRIMARY SCHOOLS OF CHRISTIANIA, NORWAY.

Hjort examined 4015 children between the ages of seven and ten, 2090 of which were boys and 1925 girls. Among the boys, 36 (1.7 per cent.) had favus; 15 (0.7 per cent.) had tinea tonsurans, and 356 (17 per cent.) had pediculosis. Among the girls, 26 (1.35 per cent.) had favus; 18 (0.90 per cent.) tinea tonsurans, and 751 (39 per cent.) pediculosis.—*Norwegian Journ. Med. Sci.*, June, 1887. (Report of Dr. Fr. Ecklund, Corr. Ed.)

TREATMENT OF EPITHELIOMA OF THE SKIN BY CHLORATE OF POTASSIUM.

This treatment, though recently revived in Ireland and in this country, has never been widely practiced. Reclus gives some facts in support of its value. The treatment of epitheliomata, by the topical application of chlorate of potassium, seems to have been first suggested by Tedeschi in 1847. In 1863, Bergeon published an important contribution on the subject.

EPIDERMIC CYSTS OF THE FINGERS.

Reverdin, in a very complete monograph upon this subject, gives a case of his own, with an analysis of thirty-two similar cases, scattered through modern medical literature. He says that these cysts were

formerly considered merely as pathological curiosities. By some they were considered simple sebaceous cysts, by others epidermic cysts. From Gross' time the cysts, properly so called were distinguished from "pearly tumors," and some effort was made to ascertain their etiology. Traumatism, deep epidermic grafting, and the formation of ordinary dermoid cysts, were supposed by various observers to account for their origin. Reverdin examines the question at such length, that we can only touch upon the chief points developed by him.

With regard to the locality of epidermic cysts of the hands, these are almost invariably (31 cases out of 32) seated upon the palmar surface. In 26 out of the 32 cases (there were 31 cases of single cysts and 1 of multiple, *i.e.*, 2 cysts) the palmar aspect of the fingers was the seat of the growth. In 6 cases the palm of the hand, or the inter-metacarpal surface, was affected. In 3 cases the thumb was affected, in 12 the index, in 2 the middle finger, in 1 the ring finger, and in 2 the little finger. The right and left hands were affected in almost equal proportion.

As regards size, the tumors varied from pea to almond size—only once larger. The size of the cyst was sometimes increased by an accumulation of epidermis, a sort of callus.

Examined by the naked eye, the tumors were usually either composed of large, thin-walled cysts, or (with intermediate forms) of a thick, resistent wall, containing a relatively small central cavity. The contents of the cysts were thin and grumous. A careful review of the reported examinations leads Reverdin to the conclusion that the term epidermic cyst best expresses our present knowledge of the pathological anatomy of these tumors.

The question of etiology has an important bearing on the nature of epidermic cysts of the fingers. As they are usually found on the parts most exposed to wounds, as also in many cases reported, the cyst occurred at the point of a previous injury, by a cut or penetrating wound, and in persons exposed by their profession to such injuries, it is reasonable to suppose that they are of traumatic origin.

As regards the external appearance of epidermic cysts, they are usually smooth, regular, roundish, or oval tumors, in the latter case having their long axis parallel with the length of the finger. The skin covering the tumor is commonly unaltered, excepting when thickened and bunion-like, or when inflammation has given a red coloration. The tumors are usually free and mobile under the skin and over the subjacent parts. Occasionally, however, they are more or less adherent above or below. The cysts are usually firm and elastic, like fibromata. Rarely, they are of stony hardness, due to calcareous degeneration. Now and then fluctuation or crepitation are observed.

Usually the tumors give little pain or inconvenience at first and

for a long time. Later they may interfere with the movements of the hand by their size or attachments, or may become spontaneously painful. Occasionally, inflammation and suppuration may occur, the tumor opening externally or internally, with spreading discharge under the skin. Now and then a permanent external opening is maintained.

The diagnosis of cystic tumors of the fingers should not be difficult. Their seat on the palmar surface of the finger, their regular form, their firm and elastic consistency, their complete or almost complete independence of the skin above and of the tissues beneath, particularly the sheaths of the tendons, their development subsequent to a wound at a greater or less distance of time, should give rise to a strong suspicion of their nature. Their development slowly, during a long period, and then more rapidly, is another element in the diagnosis. Puncture with a bistoury, followed by the escape of characteristic contents, or evacuation of these contents by a spontaneous opening, should leave no doubt as to the character of the tumor in question. The reason why the nature of these tumors has rarely been ascertained until after they have been operated upon, and then has often been a surprise to the operator, is because the existence of epidermic cysts has not been suspected, they having been confounded with fibromata or synovial cysts.

The treatment of epidermic cysts of the finger consists in removal of the entire tumor. Even if a small portion remains behind, the tumor may be reproduced.

One of the most interesting portions of Reverdin's paper is that in which he demonstrates with logical severity the pathogenesis of the affection. This is too long for abstract. He concludes: "If, as I suppose, these cysts of the finger originate in a traumatic inclusion, there should be nothing astonishing in the fact that their structure is analogous to that of dermoid cysts, of which the origin is an embryonal inclusion."—*Rev. Méd. de la Suisse Romande*, March 15, 1887.

PELLAGRA.

Pellagra is one of those foreign diseases which it is fondly hoped will remain in the effete despotisms to which they are at present confined. That our own happy country cannot always hope to be free from these plagues, the constantly increasing number of lepers in the United States bears witness; and so, with the continual immigration of the peasantry of southeastern Europe, we may expect to be brought sooner or later face to face with the curious and serious malady known as pellagra.

For this reason, Niesser's excellent lecture on the subject, delivered not long since before the physicians of Vienna on "Pellagra in Austria and Roumania," is worthy of abstract in these pages.

The disease shows itself by a series of skin, intestinal, and nerve-symptoms. A condition of lassitude, with headache, dizziness, pain in the back, gastro-intestinal disturbances usher in the disease, while in the spring of the year erythematous patches make their appearance upon the exposed portions of the body, particularly on the backs of the hands and feet. After some weeks' duration the skin and other symptoms disappear, and the disease seems for the time to be in abeyance. The following spring, however, it recurs with the former symptoms, some intensified, and, in addition, severe cerebro-spinal symptoms may occur, with cramps and muscular atrophy. During this patients often succumb to suicide, or with typhus or meningeal symptoms. When the patient survives, and the disease continues to make progress, cardiac weakness sets in, the marasmus progresses, paralysis of the extremities and of the bladder occurs, colliquative diarrhœa with dropsy sets in, and the intellectual disturbance goes on to idiocy or imbecility.

The succession of symptoms is not always the same. The erythema is usually the first symptom, and closely connected with this the nervous and intestinal manifestations. But these may be preceded by a sort of prodromal stage of mental and nervous symptoms.

After giving the symptoms at some length, Neisser goes on to speak of the etiological factors, which he believes, with other writers, to be general misery, with particularly the use of spoiled maize.

The various suggestions Neisser makes for the prevention of the disease are of a hygienic character—better food, better air, better habitations. These are more important for the Germans than for us, since, excepting in our larger cities, they are possessed by all.—*Wein. Med. Zeitung*, January 23, 1887.

TWELVE CASES OF RUPTURED TUBAL PREGNANCY.

BY

LAWSON TAIT, F.R.C.S., M.D., Etc.
Birmingham, England.—(Corresponding Editor.)

In the columns of the *British Medical Journal* I have already reported twenty-three cases of ruptured tubal pregnancy, in which I performed abdominal sections, and tied the bleeding point on account of hemorrhage, which threatened life. All of these cases recovered with one exception, the first in which I operated. I have now to contribute a further group of twelve cases, in which there have been eleven recoveries and one death, as follows :—

Case XXIV.—P. B—, aged 24, married. Sent to me by Dr. Price, of Dudley Port, with a letter to the effect that he thought the

case he had sent was very like one which I had just recently operated upon for him, and which proved to be tubal pregnancy. She had missed nearly three months, and was suddenly attacked by violent pain. I operated upon her on February 2, 1886, and found a belly full of clots and dark, purple-colored serum, with a ruptured Fallopian pregnancy of about the twelfth or thirteenth week, the fœtus being found immediately alongside the tube on the placenta, *in situ*. I washed the clots freely out and put in a drainage tube. She made a somewhat difficult recovery, but went home on February 27th perfectly well. The diagnosis in this case had been made with perfect accuracy by Dr. Price before I saw her.

Case XXV.—J. E—, aged 35, married eighteen years. Had suffered severe pain all her menstrual life, had one daughter very soon after marriage. She thought she had had three miscarriages six or seven years before, but had no living child. She ceased to menstruate suddenly at the end of January, 1886. She had no symptoms at all until the end of April, when a second attack of pain induced her to keep her bed. This pain continued for about ten days, and she had a feeling of great lassitude and exhaustion, and was noticed to be very pale. She recovered and got up, and about the middle of May another attack of a similar kind induced her to go to bed and call in Dr. Cunningham, of Oldbury. A third, and still more violent attack, occurred on the 2d of June. I saw her, diagnosed ruptured Fallopian pregnancy, operated on the 4th, and found a pregnancy of about the twelfth or thirteenth week of the right Fallopian tube, and the abdomen full of clots and bloody serum. I washed it out with warm water, used a drainage tube, and she left the hospital on July 1st quite recovered.

Case XXVI.—C. H—, aged 32, married fourteen years. Nine children, supposed to have had a miscarriage at the end of April, 1886, never well after, but she had something like a period after an attack of violent pain in the middle of May. Since then her life was completely burdensome. She suffered intense pelvic pain, and was obliged to be most of her time in bed. On the 13th of July she had a severe attack of pain and collapse, after which I saw her and diagnosed ruptured tubal pregnancy. I operated on the 16th, and found my diagnosis correct. The abdomen contained large quantities of clots and bloody serum. I washed it completely out with warm water, employed a drainage tube, and she left the hospital quite well on August 2d.

Case XXVII.—A. H—, aged 34, married; was seen by me at the out-patient department on September 16, 1886. She was doubled up with pain in the lower abdomen and back, which had been going on for some months. She thought she had a miscarriage in the beginning of July. She had a great loss of blood then, which had been

getting increasingly worse ever since. I found the cervix shortened and very soft, the uterus fixed and enlarged, with a cystic mass to the left of the cervix, running above it and behind it. She was so exsanguine that she seemed to be in a momentary condition of fainting, and her skin seemed to be tinged with hæmoglobin, the whole of the abdomen was extremely tender. I had no hesitation in diagnosing ruptured tubal pregnancy, the diagnosis being verified at the operation. I found no fœtus, but pieces of the placenta loose in the abdomen, and a large quantity of clots and bloody serum. She never seemed to completely rally from the operation, and died on October 2d, that is, the fifth day. I could not obtain a *post-mortem* examination.

Case XXVIII.—G. W—, aged 44, married at twenty-two first time; had one child, which only lived seven months. She was never well after; suffered from menstrual pain. Married a second time eleven years ago; no children; menstruation always regular, profuse, and always accompanied by a great deal of pain. Eight years ago she suffered from what was called an attack of inflammation of the bowels; in bed for three months; her health has been very bad ever since. A violent attack of pain came on suddenly on November 5, 1886, from which time she never left her bed, suffering intense pain, until I saw her early in January. She had not menstruated, but there had been irregular hemorrhagic discharges. She was under the care of Dr. Annie Clark, as an out-patient. The whole of the roof of the pelvis was fixed, and no diagnosis could be arrived at. I made an exploratory incision on January 26th, and found the abdomen full of clots and bloody serum, and a Fallopian pregnancy of about the third month, which I removed. I washed her out thoroughly, put in a drainage tube, and she went home perfectly well on February 13th.

Case XXIX.—Late on the evening of February 16th I received a telegram from Dr. Dolan, of Halifax, to proceed at once to that town to operate upon a case which he believed to be one of ruptured tubal pregnancy. The following is the account which Dr. Dolan has given me: "P. W—, aged 29, married, four children living, youngest two years old; had a miscarriage nine months ago; has always been regular, but missed the last period. Felt uneasy for the past few weeks; felt, she said, as if there were a weight, and as if the womb were coming down the passage; enjoyed good health up to this time. About 9.30 A.M., February 11th, I was called to see her, and found her in a state of collapse. She revived, and then complained of pain in the abdomen; symptoms like those of colic, vomiting, abdomen distended, great flatus. This continued for some hours; was relieved by ether and champagne. She had several attacks during the day, and I saw her altogether seven times. At 10 P.M., same night, she begged for something to give her sleep, and I gave her a dose of chloral, bromide of

potash, and camphor water. She slept the whole night. A nurse had been obtained immediately after the first attack. On the morning of February 12th, she was to all appearances perfectly well; was free from pain, and, as she said, she felt as if there was nothing the matter with her; there was, however, a good deal of flatus, and the abdomen was distended. She told me she had gone to bed on the Thursday night perfectly well, but on rising in the morning, about 7 A.M., she felt a sudden pain about the umbilicus. When she got up she tried to work it off. I told her husband I feared there was some internal hemorrhage caused by rupture of tube, but as she was so much better I would wait and see whether I was right. She was kept in bed in charge of the nurse, and not allowed to move. This treatment was continued until the following Thursday. There was no return of pain or collapse, and she said she did not know why she was kept in bed. At midnight I was hurriedly summoned to see her. She had been out of bed for a short time and almost the same symptoms came on—sickness, tendency to faint, cold sweats, with a sense of fullness in the abdomen. Her appearance was changed, face was blanched, the abdomen was distended, but there was no localized swelling. By rest she again revived. I told her husband that I was now certain as to what she was suffering from, and an operation would be required. He gave me permission to call in Mr. Lawson Tait, whom I telegraphed for as soon as I could." On my arrival I completely agreed with Dr. Dolan's diagnosis, and I opened the abdomen without further delay, and removed an enormous quantity of clots, bloody serum, and *débris*. The tubal pregnancy was on the left side, I tied the broad ligament, removed the pregnancy, washed her out thoroughly, and put in a drainage tube. Dr. Dolan stayed with her all night, feeding from time to time with diluted champagne. She gradually rallied, there was but slight discharge from the tube, very little pain, the pulse came down day by day, and on February 25th she was regarded as convalescent, and is now in a condition of perfect health.

I left Halifax that night by a train which reached Birmingham at about eight on the morning of the 18th, and in an hour had to operate upon the following case of Dr. Hoare's. This formed one of the most remarkable coincidences that has ever occurred in my practice, two cases of ruptured tubal pregnancy in twelve hours. In both of the cases the diagnosis was completely made by the practitioners in charge.

Case XXX.—M. C—, aged 31, married eleven year, had two children; the eldest, six years old, was sent to me by Dr. Hoare, of Aston, with the following note: "A good deal of obscurity surrounds the early history of this case, on account of the unintentional self-deception of the patient, and the extreme reluctance she showed to confess-

ing herself to be out of her usual state of health, a condition in which she persisted until pain and difficulty of micturition forced her to seek surgical aid to overcome the latter. The patient has had two children without anything abnormal in the confinements or sequent convalescence. Her youngest child is nearly two years old. About two months ago, I was called to attend her at intervals of *malaise* and recovery till three weeks ago. She complained then of general weakness, inability to get through her household work, and prostration. I felt sure she was pregnant, but the patient herself said she was perfectly sure she was not, almost resenting the suggestion. A day or two before you saw her with me I was again called in; this time she complained of severe pain and inability to make water; the passage per rectum was free and regular; on passing a catheter only a few ounces of urine came away. On digital examination a large doughy mass was felt in the recto-vaginal sac, which ultimately proved to be a tubal pregnancy." I saw her on the morning of the Thursday, diagnosed ruptured Fallopian pregnancy with hemorrhagic effusion into the abdominal cavity. She was removed into the hospital, I operated next morning, and found the abdomen full of clots and bloody serum, and a ruptured pregnancy, of the ninth or tenth week, of the right tube. I washed her out, put in a drainage tube, and the patient went home perfectly well on March 7th.

Case XXXI.—P. B—, aged 29, married. When visiting at Monmouth, I saw this patient in consultation with Dr. Prosser. He told me that she had been admitted to the Monmouth Hospital with severe pelvic symptoms. She had been ill for some weeks. I made an examination at Dr. Prosser's request, and said I was perfectly certain it was a case of a diseased tube; when I said that, he proposed she should be sent to Birmingham for operative treatment. She was so removed on April 27th. After having quite satisfied myself that it was a case of ruptured tubal pregnancy, I operated and removed it. At least two ruptures had taken place, because there were layers of clots of two different dates, the first being quite bright and of recent origin. She recovered, and returned quite well on May 23d.

Case XXXII.—A. E—, aged 30, married eighteen months, sent to me by Dr. Gordon, of Walsall; never pregnant; had not missed any periods, her last period having occurred at the end of April. She was sent to me with a note to the effect that "she had been confined to bed with pelvic troubles for about three months." These symptoms increased in severity, until Dr. Gordon advised that she should be placed under my care for an operation, if necessary. I examined, and found a cyst on the right side of the uterus, extremely tender to touch, and the whole of the abdomen distended and tender, with threatening, if not already advanced, peritonitis. I admitted her to

hospital, opened her abdomen on May 6th, and found a tubal pregnancy on the right side; but the whole thing was so infiltrated with clots and rotten that nothing could be identified, except the stump of the broad ligament, to which the disintegrating masses of the remnants of the Fallopian tubes were attached. I washed her out and drained, and she left the hospital quite well on May 28th.

Case XXXIII.—G. S—, aged 44, married, was seen by me in consultation with Mr. Lafarelle, of Coleshill, in July. Her youngest child was nine years old. She menstruated quite regularly until the last two or three years; her last period was in May; it then stopped for eight weeks and returned suddenly with severe pain, from which pain she had never been free until I saw her in consultation in July. The condition she had been suffering from we both regarded as local peritonitis, the chief trouble being over the transverse colon. There was an increased night temperature, and distension of colon, with sickness, which gave us both the impression that she was suffering from chronic colitis. I made a pelvic examination without discovering anything. She remained in a condition of invalidism until the last week in August, when Mr. Lafarelle discovered a pelvic tumor. He then asked me to see her, as it seemed to be growing very rapidly. I saw her on September 15th, and found a large mass not well defined, and yet clearly pediculated to the left side of the uterus. She was very exsanguine, abdomen greatly distended, and I hazarded an opinion that it was a rapidly-growing ovarian tumor, which had become rotated and gangrenous. I admitted her to my private hospital, and operated on the 17th, when, to my surprise, I found she had a ruptured tubal pregnancy, in which I found a fœtus of about the tenth week, which had clearly been dead for several weeks. The abdomen contained large quantities of clots and bloody serum of a much earlier date. I washed her out, used a drainage tube, she made an uninterrupted recovery, and went home on October 14th.

Case XXXIV.—G. F—, aged 28, married eleven years, had four children, youngest five years old; periods ceased for twelve weeks about Whitsuntide, then she had severe flooding for eight weeks, the last of the discharge having been seen about the beginning of September. She was extremely anæmic, everything in the pelvis was fixed, the abdomen was much distended, and she looked very ill. I saw her on September 19th, and diagnosed a ruptured tubal pregnancy. I opened the abdomen next day, found large quantities of clots and bloody serum in it, and removed a ruptured tubal pregnancy of the right side. She made an uninterrupted recovery, and left the hospital on October 5th, quite well.

Case XXXV.— — B—, aged —, married. On September 28th I got a letter from Dr. Williams, of Wrexham, asking me to go to that

town to see a patient with him, who was supposed to have had a miscarriage in the summer, and she had looked upon herself as again pregnant, having had something like a period about the end of July. A fortnight before Dr. Williams sent for me, she thought she had another miscarriage: "She had some sanguineous discharge, accompanied with uterine expulsive pains. This continued, with occasional subsidence of the pains, but not for long, they having appeared like strong labor-pains; to-day they have been very severe, and this afternoon she parted with a large quantity of water, which the nurse considered to be the liquor amnii, but it gave no relief. There is some tenderness of the uterus and peritoneum generally. She is very anæmic and prostrate, and able to take but little nourishment. Her temperature is not much disturbed, and her pulse is feeble, ranges from 80 to 100." I saw the patient next day, and found the roof of the pelvis fixed, and an ill-defined feeling of bogginess all over the abdomen. But the patient was so tender that an examination was impossible, and her condition of anæmia was so serious that I did not feel justified in pressing the employment of an anæsthetic, unless I might at the same time operate. I gave the opinion that there was nothing in the uterus, and I doubted very much the belief that the patient had concerning her miscarriage. I hazarded an opinion of ruptured tubal pregnancy, but felt by no means quite sure of it; but considering that the patient was extremely ill, I urged an exploratory operation without delay. This was at once assented to, Drs. Edward and Llewelyn Williams, and by the husband of the patient, so that I returned to Wrexham next morning and found my patient much worse, far more exsanguine. I opened the abdomen at once, and found it full of clots and bloody serum, several pints of which I removed. The source of the hemorrhage I found to be a tube distended by an ovum, and ruptured. I removed it with much difficulty, and tied the stump. The patient has made a tedious but quite satisfactory recovery.

Concerning these cases I have first of all to say, that they complete a series of thirty-five operations, performed every one of them under conditions of the utmost gravity, where life was threatened, and I have no hesitation at all in saying that thirty-two or thirty-three, if not all thirty-five, of these lives would have been sacrificed but for prompt interference. Of the thirty-five, only two have succumbed. One, as I have already said, the first on which I operated, because I knew not what to do. I was too long over the operation, I fiddled about securing the bleeding points as they arose, instead of doing, as I always do now, separating all adhesions regardless of the bleeding points, until I get as rapidly as I could down to the base of the tumor, which is the broad ligament. A ligature placed round that

and secured, at once arrests hemorrhage; not a drop was ever lost after that. The other case who died, number four, the hemorrhage had already progressed too far, the patient was almost dead at the time I operated. She made a great struggle to get through, and lived five days and then succumbed. I almost wish in this case I had tried transfusion, but I have no great belief in the efficacy of that proceeding, and therefore did not do it. I think now I have cause to regret, perhaps, not having made the effort.

All the points of my previous papers on this subject are confirmed by the facts of these twelve cases. The diagnosis is not always possible, but it may be made correctly in probably eighty-five per cent. of the cases. The real clue to the nature of the case, is a history of sterility for some considerable time, the arrest of menstruation for weeks or even months, a sudden access of pain and collapse, with repetitions of these attacks, as graphically described by Dr. Dolan in his communication concerning his own case. The operation is simplicity itself. Open the abdomen, go at once to the seat of the rupture, that is, the broad ligament, and tie it, for, until you come to absolutely the ligament itself, the tissue is always so rotten and friable that no attempt to arrest hemorrhage in any other way can succeed. Then clear out the *débris*, put in a drainage tube. Of course, amputation of the ligatured mass is a matter of necessity, no one would ever dream of leaving such a thing to putrefy in the abdomen.

Mr. J. E. Burton, of Liverpool, seems to have some method of his own, by which he could leave a woman, as he says, in a clean condition surgically, and yet leave a mass of disintegrating organs infiltrated throughout with blood clots to rot in the abdomen, and if this mass is removed he calls it a mutilation. Technically, it is a mutilation in the sense that the woman rises from her sick bed with one Fallopian tube and probably one ovary, where formerly she had two, but it cannot be imagined that these organs after the operation could ever resume their functions, and they certainly could not maintain any active life after the broad ligament was tied. To talk, therefore, of its being a mutilation, an operation that can be dispensed with, or an operation that can be successfully accomplished in other ways, can only be the utterances of a man who has had no experience on the subject at all. It may be, however, that Mr. J. E. Burton has had revealed to him by some special interposition of Divine Providence a new method of abdominal surgery which has been denied to me. If this is so, I call upon him to declare it.

Speaking of the treatment of these cases one is obliged to allude to the scheme by which it is proposed to destroy the life of the fœtus, and to arrest the growth of the ovum. All I can say is that I am never called into these cases until the discussion of a proposal of that kind

is too late, for being engaged exclusively in special practice I have no opportunity of seeing these cases, and never have seen them until the period of rupture. We have then no concern with the fœtus at all, we have to deal with bleeding from the placental structure, and from the maternal sinuses in connection with it. An electrolytic needle under such circumstances would have no more effect than a pinch of snuff. In one of the preparations now laid before you, we have abundant evidence of the fœtus having been dead for weeks, and yet hemorrhage had been going on. The probability is that that fœtus had been dead for ten weeks before the operation was performed, and yet bleeding had been going on on the morning of the operation. If the cases were seen and diagnosed, as I have already publicly expressed my doubt they could be before the period of rupture, the introduction of an electrolytic needle, if it happened to pierce the body of the fœtus, might kill it; but would it kill the placenta, which, as we know in the majority of instances, appears to go on growing when the fœtus is dead? There can be no question that in these cases it goes on growing after the fœtus is dead. But whether this be the case or not, the propriety of destroying the child before the period of rupture, if its presence in the abnormal position can be recognized, I leave to the discussion of the physicians who see these cases before the period of rupture. When the period of rupture, however, has been reached and hemorrhage is going on, there is nothing, so far as I can see, but for us to follow the surgical rule to cut down and tie the bleeding point.

That I should be able to produce within the short period of seven years thirty-five cases of this condition, treated by operation, confirms completely the statement of Dr. Blundell, that it is by no means uncommon. That it has been, when left alone, almost uniformly fatal, is a view which he strongly maintains, and which all evidence confirms. In fact there is a paragraph in Dr. Blundell's writings which sums up all that was known, and all that is known now, save in the matter of operative details, concerning the frequency and cause of this peculiar displacement. "I have never seen any cases of tubular pregnancy in which the tube was of great size. More generally this canal enlarges to about the size of a small fist; sometimes to the size of a pullet's egg only; and in the early part of gestation (say in the second or third month) this cyst bursting open, the child escapes into the peritoneal sac, and the woman suddenly perishes by an internal hemorrhage. Many women, I have little doubt, die in this way; but, being buried without examination, the real cause of their death is never ascertained. Three or four tubal gestations of this kind have taken place within the circle of my own obstetric acquaintance; whence I infer that the disease is by no means rare."

Thanks to the progressive emancipation of the professional mind

from the thraldom of authority within the last ten years, we have now the means, if we have a reasonable time in which to act, to save at least the great majority of these cases.

As I have already said in communications to the Pathological Society, I do not think it possible to over-estimate the value of the recent contribution of Dr. Berry Hart, and Mr. J. T. Carter, on the results of the examination of frozen sections of two cadavera, in which advanced uterine gestation was observed.

The views which I advanced concerning the pathology of extra-uterine pregnancy, so long ago as 1873, have been entirely confirmed by facts that I have since seen in the operative details of this condition. But the misfortune of the operation is that it is witnessed by few people, and in such cases as those in which the operation is performed at the time of early rupture, the details are not perceptible to any one except the operator. It became, therefore, a matter of the utmost difficulty to persuade my professional brethren of the accuracy of my views, and, except that they were always alluded to in writings on the subject, seemed to make very little impression. Dr. Berry Hart's observations have completely proved the accuracy of the views which I had about this peculiar displacement.

Briefly stated, what I regard as the true pathology of extra-uterine pregnancy is as follows:—

In the first place, one or both, generally both, of the Fallopian tubes are so damaged by inflammatory change—desquamative salpingitis—that the procreative machinery is put out of gear. My belief is that the chief function of the cilia of the Fallopian tubes is to prevent the access of spermatozoa, and that, therefore, impregnation takes place in the tube only when deprived of their cilia. Adhesion to the impregnated ovum then takes place to the wall of the tube instead of the wall of the uterus, and then the ovum develops until the tube can no longer expand. Between the tenth and thirteenth week the tube gives way, and upon the position of the point at which the rupture takes place depends the variety of extra-uterine pregnancy, which is developed. By far the most common seat of rupture is out through the surface of the tube into the cavity of the peritoneum. Because the proportion of the circumference of the tube, which is covered by peritoneum is very much greater than the proportion of the circumference of the tube which is related, to which is called the cavity of the broad ligament. This rupture into the peritoneum, so far as we can tell, is fatal in an enormous number of instances; what the proportion is we cannot say, but it looks to me as if it were ninety or ninety-five per cent. Enormous sinuses are developed in the tube, and in the mass of the placenta these are torn, they bleed, the hemorrhage is recurrent, and the patients die of hemorrhage into the cavity of the peritoneum,

forming the variety of intra-peritoneal hæmatocele, or they die later on of purulent peritonitis.

No doubt some of the cases must end in the death of the ovum without much hemorrhage, and become absorbed, but it is perfectly clear that in these cases the tube will remain functionally useless, because it has been sealed probably at both ends by inflammatory disturbance, and therefore will be a perfectly useless organ. So far as we know, in the whole realm of surgical literature there is only one case in which there is the least evidence of what may be called an abdominal pregnancy going to the full time, that being Mr. Jessop's case; and even that is open to the view that it would have been one of the other variety, in which the walls of the ovum cavity and the posterior layer of the broad ligament, ruptured just at the last moment, and the child was found in the cavity of the abdomen. At any rate, except his case, there is no evidence at all of any case in which the ovum has been, or the child has been, developed inside the peritoneal cavity. In fact, considering the harmoniously active digestive powers of the peritoneum, the likelihood of the occurrence of such an incident would be very small.

The second form of rupture, into the cavity of the broad ligament, on the contrary, forms a condition which is, so far as I know, never fatal, or only rarely so, one instance alone having been placed on record in which death has taken place from the hemorrhage. In that case the fatal issue was doubtless due to the rupture of the cyst into the cavity of the peritoneum, so that really the exception is an example of the rule being proved. Doubtless in many of the cases of this variety the ovum dies at once, or is absorded like an ordinary broad ligament hæmatocele. But in other cases the ovum does not die, but goes on developing to the full time. Death, however, occasionally interfering with the progress of the pregnancy at the fourth, fifth, or sixth month. Then we have the group of cases in which, after suppuration has taken place, the bones of the fœtus are discharged through the rectum, through the bladder, or through Douglas' *cul-de-sac* into the vagina. Many instances of this have occurred in my practice, as also have cases in which a lithopædion is the result. Such a lithopædion probably would have resulted in Dr. Berry Hart's first case.

The minority of the minority proceed to the full time, and are removed either as living or as dead children. Examples of both I have published at the full time. They are removed from a cavity which Dr. Berry Hart proves completely to be extra-peritoneal.

This last view was what I based all my conclusions upon, that these full time extra-uterine pregnancies were entirely extra-peritoneal, the only place in which they could be was the cavity of the broad ligament, and, therefore, I concluded that they were due to a

rupture from the Fallopian tube into the cavity of this structure. Dr. Berry Hart's two preparations absolutely establish the justice of this conclusion.

One remarkable thing about Dr. Berry Hart's section is worthy of notice, because it explains completely the only difficulty which I found in the whole thing. That is, that whilst the peritoneum is lifted right off the pelvis, all round the organs contained in it in every direction but one, it is not lifted from the anterior surface of the uterus. We have, therefore, a prolongation, like the finger of a glove, of peritoneum curving down in front of the tumor, although reaching as far as the fundus of the uterus into the base of the bladder, on either side of this it is completely lifted. This explains what puzzled me greatly in two instances of my operations, that opening in the middle line. I had to close the cavity of the peritoneum after having passed through both its anterior and posterior layers.

These observations of Dr. Berry Hart, as I have already said, completely establish my view of the pathology of extra-uterine pregnancy, and these views of themselves enormously simplify at once the pathology and surgery of the condition.

LEPROSY IN VENEZUELA.

THE LEPER HOSPITAL OF MARACAIBO, VENEZUELA, WITH ILLUSTRATIONS OF CASES IN THE VARIOUS STAGES OF THE DISEASE.

By EUGENE H. PLUMACHER,
(U. S. CONSUL,)
Formerly Professor in the University of Nashville, Tenn.

(Concluded from August number.)

With the establishment of matrimonial relations and the system of separate cottages for those who desire them, the island is beginning to assume the aspect of a rural municipality. Its extent is little more than a mile square, with good soil, of which advantage has been taken by the well-to-do patients for the cultivation of various products and the breeding of goats. The territory has been artificially stocked with game, which is now becoming abundant, and nothing seems to have been omitted to secure the comfort and welfare of the unfortunates. A library is at their constant disposal, and occasional musical entertainments are furnished by the Junta, whose efforts seem directed to the establishment of a veritable home for the patients, where they may, as far as possible, forget their afflictions and pass their lives in cheerfulness. Weekly visits of relatives and friends are allowed, which are looked forward to with eager anticipation, and the discipline generally is mild and judicious, punishment being meted out with justice and

humanity to evil-doers, a proportion of whom must naturally be found in every community, even of lepers.

The disease assumes various phases, the most common type being the tuberculous, manifested in distorted features, enormous pendant ears and lips, and an abundance of exaggerated wrinkles. I have seen children of both sexes of twelve or fourteen years of age with the features and bearing of octogenarians, and some of the saddest cases are of this class. As the disease progresses, the extremities are attacked and slough off, the body becomes scaly, and at times covered with ulcers, and the faculties of sight and hearing are frequently entirely destroyed. The photographs sent herewith will give a better

idea of the progress of the malady than can any general description on my part.

There has been much difference of opinion as to whether or not the disease is contagious, and although the great majority of laymen, who have not specially studied the subject, believe no doubt that it is a true contagious malady, I am inclined to believe that the weight of medical opinion, at least in this country, is opposed to that theory. The present superintending physician of the Maracaïbo Lazareto, Dr. Alcibiades Flores, is, however, a firm believer in the doctrine of contagion, even going so far as to state that our recent expedition to the island was a dangerous experiment which might result in the contraction of the disease and the subsequent blighting of the life pros-

pects of the members of our party. It is true that on that day our intercourse with the lepers was of a much more intimate character than if we had been ordinary visitors.

The case of Father Damian of the Hawaiian Islands, who, after years of devoted service among the lepers of Molokai, has at last succumbed to infection, is quoted by the advocates of the contagious

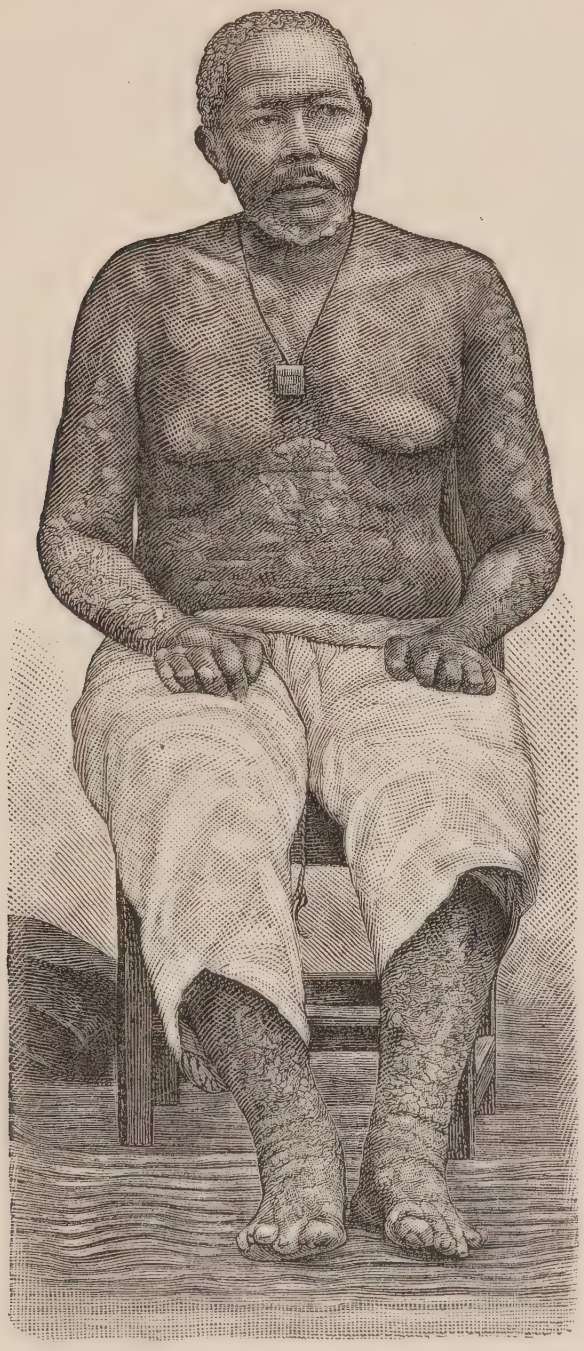
theory, but even in that instance some explanation might be given which would detract from its value as a settlement of the question. Although Dr. Flores is an advocate of the theory that the disease is contagious, yet he also states that to transfer it from one person to another, the latter must have a certain *leprous predisposition*, an admission which would clearly indicate that leprosy *per se* is not contagious. I translate from the doctor's note:—

"Among the principal causes of leprosy are hereditary taint, and

secondary and tertiary syphilis. In my practice, I have observed many cases in which the disease has passed from generation to generation, and I have noticed that leprosy, unlike most hereditary complaints, rarely disappears in one generation to reappear in the next. One of the patients being a leper, the son is in imminent peril, even should he have been procreated before the appearance of the first symptoms in the parent. As regards syphilis, leprosy will never be developed from its primary phases, but in this country it is considered nothing remarkable to see persons suffering from secondary or tertiary symptoms converted into unmistakable lepers. Among other causes may be mentioned alcoholic excesses, uncleanliness, sudden chilling of the body, and all circumstances which may cause physical or moral depression, leprosy being one of the phases of tubercular

diathesis. Regarding contagion, I have always believed that contact accompanied by constitutional predisposition will produce the disease, and also that with this predisposition on the part of an individual, he may be infected by simple proximity. It is probable that the microbes of leprosy do not solely produce the disease *per se*, as in that case all persons who dedicate themselves to the care of the sufferers, and live intimately with them, would be infected; so much the more if, as taught by a certain professor, these animalculæ find their nutriment in oxygen, which is one of the elements most abundant in the human organism. We see, however, the contrary at the Lazareto, where persons, whole and healthy, devote themselves to the care of their sick relatives, living in the same apartments, using the same utensils, and washing their clothing. In the case of husband and wife, of whom there are many on the island, the intimacy of conjugal life would

seem to offer special dangers; but all of these devoted attendants retain their normal health, although many have been in the Lazareto for years. In order to produce the contagion, it is therefore necessary that the person contracting the disease be under the influence of certain special conditions, and surrounded by certain causes, and that his system be prepared beforehand to receive the leprous



germ; in other words, the ground must be prepared for the planting of the seed."

I confess freely that I am not a believer in the theory of contagion, properly so called. It will be easily understood, that should matter from a leprous ulcer come into absolute contact with the blood of a well person, inevitable infection would be produced, and leprosy

probably engendered, in the same manner that the surgeon at times meets his death through blood-poisoning contracted in the dissection of a cadaver. So far and no farther am I an advocate of the theory of contagion, and it is possible that Father Damian in his ministrations may have met with such an accident.

The experience of many years in the Lazareto tends the same way. Sound wives have been living with diseased husbands, some of whom have arrived at the last and most loathsome stages of the malady. Daughters have ministered to their afflicted mothers for years, and on the death of the latter have returned to the world where they are to-day, healthy mothers of healthy families. The entire history of the Lazareto for more than fifty years has been a refutation of the contagiousness of the disease.

The reason, I fancy, why physicians here sometimes differ on this point, is that there are two theories regarding the origin of leprosy, one of which—the parasitical or microbian—if clearly established, would no doubt indicate contagious qualities. The French theory of the medullar origin, together with its incurability (although the possibility of alleviation is admitted), finds the most favor among the more experienced physicians.

Various methods of treatment have been tested in the Maracaïbo Lazareto, especially the administration of the oil of chaulmoogra, which apparently gives encouraging results at first, but which produces no radical, lasting benefit. Its use is also attended with grave physical inconveniences, such as a morbid state of the liver, intestinal irritations accompanied with a slimy and waxy diarrhœa, wandering pains in various parts of the body, eruptions upon the skin, principally attacking the hands, and various other unpleasant symptoms, making the use of chaulmoogra at times intolerable. This treatment has always been entirely voluntary, but no one has been able to persevere in its use, although at present there are two patients who are attempting to give it a fair trial.

The administration of tonics and astringents has appeared to give good results, and the superintending physician already mentioned, Dr. Flores, seems to believe that by constancy in their use an almost absolute cure can be obtained.

The iodides and mercurial preparations have also been tested, as has also the tincture of cantharides, but all these remedies seem to produce more or less identical effects—that of a temporary amelioration, but without well-founded hopes of anything approaching a genuine cure.

Dr. Flores, who is a warm partisan of the parasitical theory, considers the use of camphor in the form of a syrup as one of the best methods of combating the disease, and his enthusiasm leads him so far

as to state that he is convinced that leprosy is curable if not allowed to pass certain limits, and that even those in the last stages will derive marked benefit from the camphor treatment.

So far, however, these are theories, and nothing more. As already stated, temporary alleviation has frequently been obtained by various methods, as, in a disease like leprosy, any remedy which tends to improve the state of the blood and of the general health, will no doubt have its ameliorating effect upon the malady itself. The many years of careful study and of patient and conscientious application of all methods of treatment, have in my opinion satisfactorily demonstrated the incurability of the disease, and the most that can be done is to alleviate as far as possible the physical suffering and mental distress of these unfortunate fellow creatures.

In connection with the various methods of treatment, it may be interesting to note that among many of the ignorant, an idea is prevalent that leprosy may be cured by a diet of buzzard flesh and soup. As it is necessary, however, that this regimen be observed with constancy, almost to the exclusion of other food, it is easy to imagine that not even the most zealous upholders of this remarkable remedy have been able to give it a satisfactory trial.

Referring to the possibility of error in the diagnosis of leprosy, there is at present in the Lazareto, a patient who, after three years' residence, is still considered a doubtful case. This patient, Abraham Fernandez, was finally taken from the island and placed in one of the hospitals of this city, where for several weeks he was closely observed by a board of physicians, all treatment being discontinued. Finally, no agreement could be arrived at, and he was again transferred to the island, where he still remains.

In closing these general remarks, I desire to testify my appreciation of the courtesy of the Junta, Messrs. Angel Urdaneta, Francisco Carias, I. M. Gonzalez Meoz, Alf. F. Vargas, Manuel B. Orozco, Luis Curiel, and Jorge Valbuena, who zealously lend their gratuitous services in behalf of the Lazareto, and to whom too much credit cannot be given for their generosity and Christian charity.

It is my sincere hope that this work, undertaken by me with the single view of contributing my modest share to the cause of humanity, may be both of interest and utility, and I am also pleased to be able to call public attention to the Maracaïbo Lazareto, which, in its modest, unpretentious way, is doing a hundred fold more good than many institutions of infinitely greater reputation.

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A. L. HUMMEL, M.D.

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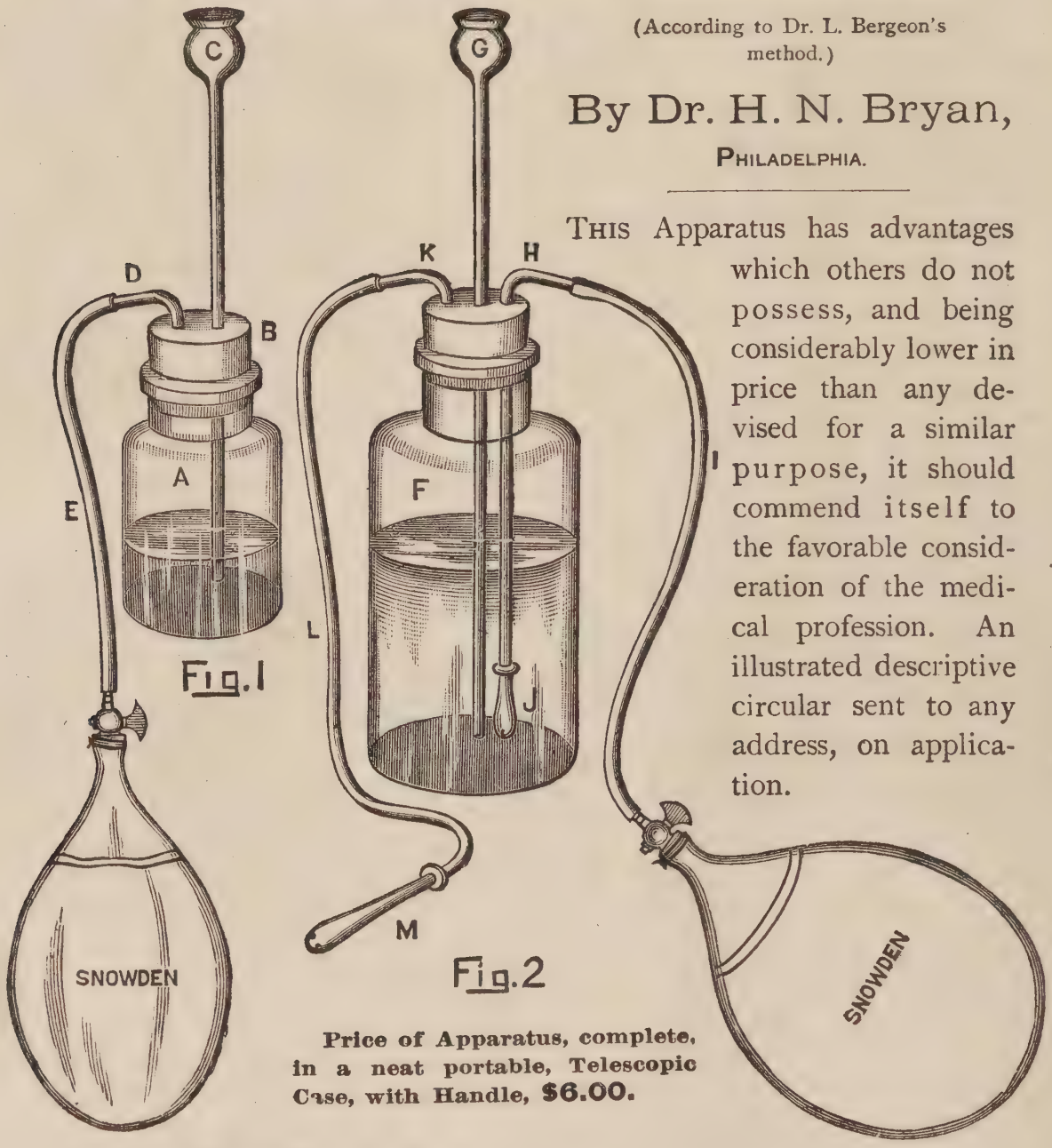

Fig. 1

Fig. 2

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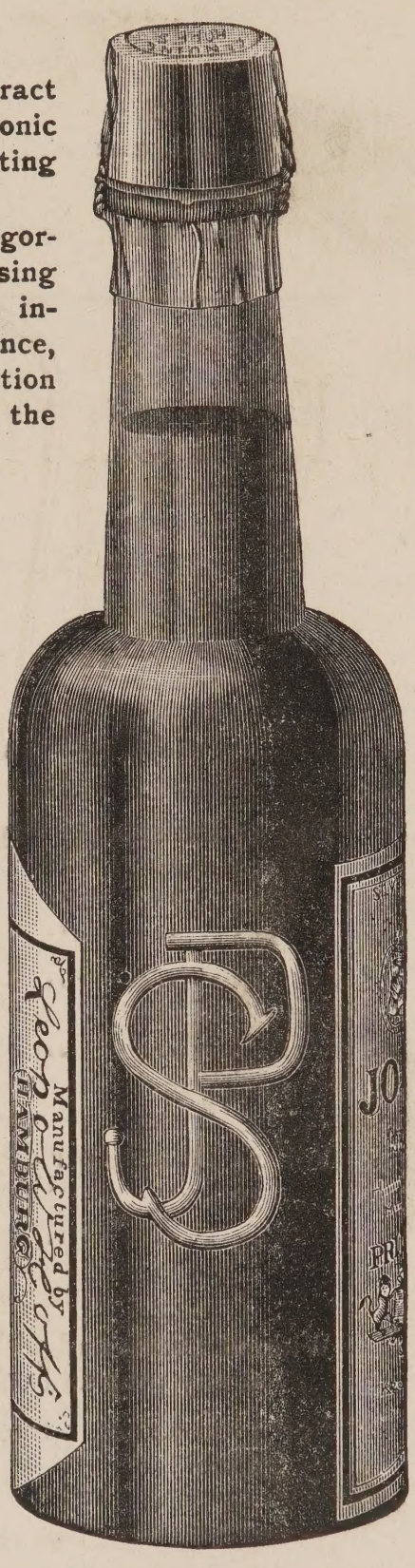

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